

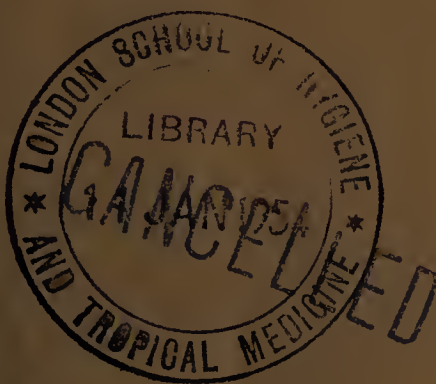
# ANNUAL REPORT

ON THE WORK OF THE

# Ministry of Public Health

for the Year 1947

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**Government Press, Cairo.**

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GOVERNMENT PUBLICATIONS are on Sale at the "Sale Room" Ministry of Finance and Economy. Correspondence relating to these publications should be addressed to the "PUBLICATIONS OFFICE," Government Press, Cairo.

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# MINISTRY OF PUBLIC HEALTH

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## ANNUAL REPORT FOR THE YEAR 1947

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### Part I—PUBLIC HEALTH

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#### Chapter I—VITAL STATISTICS

##### A. — *Population* :

The mid year population of Egypt for 1947 was 19,170,000 as compared with 18,143,059 in mid 1946. This shows an apparent increase of 1,026,941 persons over last year which is not the case since the present year's figure is the result of the decennial general Census which was carried on 26th-27th March, 1947, whereas the 1946 figure was calculated on the 1937 general census to which was added the annual surplus of births over deaths which averaged 315,595.

##### B. — *Births* :

The total number of live births for all Egypt during 1947 was 834,557 or a ratio of 43.5 per thousand population as against a ratio of 42.6 in 1946. This total number of births consists of 436,257 males and 398,300 females i.e. a preponderance of male births.

Table No. 3 shows that the highest birth-rate was in January and December. It is noticed that in many countries March is the most fertile month while July is the most sterile.

The highest birth-rate for 1947 was recorded in Ismailia and its suburbs, being 74.9, while the lowest was recorded in Qena and Gerga provinces being 32.3 and 36.1 respectively. This is probably due to:

(1) The migration of a great number of young people from Qena and Gerga provinces to the Canal Zone to work there.

(2) The improvement of economical conditions in Ismailia which induced matrimony.

##### C. — *Still-Births* :

The ratio of still-births for all Egypt during 1947 was 7.1 per 1000 births. This was 17.6 in the governorates, 4.6 in Lower Egypt Provinces and 3.8 in Upper Egypt Provinces. (Table No. 10.)

##### D. — *Deaths* :

A total of 408,577 deaths were recorded during 1947 in all Egypt or a ratio of 21.3 per thousand population as compared with 25.8 in 1946.

Table No. 1 shows that the 1947 death-rate was the lowest since 1937.

Table No. 7 gives the age and sex distribution of deaths in localities having a health bureau. It shows that deaths in the first year of life represented one quarter of all deaths, and almost half the deaths took place within the first three years of life.

The highest death-rate for 1947 was that of Ismaïlia and its suburbs being 38 per thousand population while the lowest was that of Qena being 11.5. This is probably due to the migration of large number of persons to work in the Canal Zone causing a casual increase in the population of Ismaïlia, which was not taken into account when calculating the ratio.

#### E. — *Infantile Mortality* :

The number of infantile deaths in all Egypt was 105,821 or 127 per thousand live births. This is the lowest rate recorded during the last ten years (Table No. 1). In localities having a health bureau, 59,380 infantile deaths or 168 per thousand live births were recorded.

The infantile death-rate was 174 in the Governorates, 120 in Lower Egypt provinces and 108 in Upper Egypt provinces.

Gerga and Qena provinces showed the lowest infantile mortality rates being 73 and 78 respectively.

It is observed that diarrhoea and enteritis were responsible for most of these deaths, then came congenital debility followed by bronchitis.

Table No. 9 gives the age distribution of infantile mortalities by cause in localities having a health bureau. According to this table, most of the deaths occurred within the first month of life. No deaths in the first month of life were attributed to Measles, Whooping cough or Diphtheria.

Deaths from these diseases become common about the 6th month of life. Most of the deaths from congenital debility occurred within the first month while deaths from diarrhoea, enteritis and bronchitis begin to rise from the second month of life.

TABLE NO. 1.—SHOWING BIRTHS, DEATHS AND THEIR RATES PER 1,000 POPULATION  
AND INFANTILE MORTALITY RATE

Years	Live Births	Deaths	Natural Increase	Birth-Rate Per 1,000 Pop.	Death-Rate Per 1,000 Pop.	Infantile Mortality Rate
1937 ... ..	694,086	434,208	259,878	43.5	27.2	165
1938 ... ..	704,376	429,248	275,128	43.4	26.4	163
1939 ... ..	696,746	429,033	267,713	42.2	26.0	161
1940 ... ..	697,700	444,448	253,252	41.6	26.5	162
1941 ... ..	695,016	440,981	254,035	40.8	25.9	150
1942 ... ..	658,324	494,358	163,966	38.2	28.7	168
1943 ... ..	689,771	492,644	197,127	39.6	28.3	160
1944 ... ..	722,166	472,234	249,932	41.0	26.8	152
1945 ... ..	787,502	512,003	275,499	43.9	28.6	153
1946 ... ..	774,152	469,382	304,770	42.6	25.8	141
1947 ... ..	834,557	408,577	425,980	43.5	21.3	127

**TABLE NO. 2.—SHOWING THE QUARTERLY DISTRIBUTION OF DEATHS DURING THE PAST TEN YEARS  
AND THE ANNUAL MEAN DEATH RATE PER 1,000 OF POPULATION**

Years	Quarter Ending				Quarter Ending			
	March	June	September	December	March	June	September	December
	Male Deaths				Female Deaths			
1938 ... ..	49,606	55,031	70,927	56,909	41,517	47,202	61,406	46,650
1939 ... ..	47,310	59,061	67,587	57,470	39,207	50,643	59,492	48,263
1940 ... ..	51,095	67,263	64,498	57,148	43,357	57,799	56,326	46,962
1941 ... ..	48,979	63,062	68,650	57,503	40,231	54,768	59,361	47,427
1942 ... ..	57,024	78,544	70,071	62,740	47,203	68,590	51,874	50,307
1943 ... ..	58,690	69,137	71,461	70,096	47,015	58,712	61,239	56,294
1944 ... ..	61,059	69,029	70,457	57,025	48,733	59,308	60,175	46,448
1945 ... ..	55,687	69,307	85,914	66,032	44,935	60,612	75,509	54,007
1946 ... ..	71,014	72,047	64,521	53,089	51,415	61,661	55,845	44,790
1947 ... ..	43,030	49,577	60,302	67,938	35,468	42,657	52,105	57,500

Years	March	June	September	December	March	June	September	December
	Total Number of Deaths				Annual Mean Death rate per 1,000 of Population			
1938 ... ..	91,123	102,233	132,333	103,559	22·8	25·3	32·3	25·3
1939 ... ..	86,517	109,704	127,079	105,733	20·7	26·0	30·5	25·4
1940 ... ..	94,452	125,062	120,824	104,110	22·6	29·9	28·6	24·6
1941 ... ..	89,210	117,830	128,011	105,930	21·1	27·8	29·8	24·7
1942 ... ..	104,232	147,134	129,945	113,047	24·5	34·3	29·9	26·0
1943 ... ..	105,705	127,849	132,700	126,390	24·6	29·4	30·2	28·8
1944 ... ..	109,792	128,337	130,632	103,473	25·0	29·2	29·4	23·3
1945 ... ..	100,622	129,919	161,423	120,039	22·8	29·1	35·7	26·6
1946 ... ..	117,429	133,708	120,366	97,879	26·3	31·3	26·3	21·4
1947 ... ..	78,498	92,234	112,407	125,438	16·6	19·3	23·3	26·0

TABLE NO. 3.—SHOWS THE MONTHLY DISTRIBUTION OF BIRTHS AND DEATHS AND THEIR  
RATES PER 1,000 OF POPULATION.

Months	Births			Birth Rate Per 1000 Pop.
	Males	Females	Total	
January ... ..	43,986	40,722	84,708	52·0
February ... ..	33,528	31,043	64,571	43·9
March ... ..	35,323	32,229	67,552	41·5
April ... ..	35,649	32,366	68,015	43·2
May ... ..	33,454	29,923	63,377	38·9
June ... ..	32,624	29,005	61,629	39·1
July ... ..	34,865	31,110	65,975	40·5
August ... ..	34,658	30,969	65,627	40·3
September ... ..	34,283	30,854	65,137	41·3
October ... ..	34,737	31,870	66,607	40·9
November ... ..	38,229	35,290	73,519	46·7
December ... ..	44,921	42,919	87,840	54·0
TOTAL ... ..	436,257	398,300	834,557	43·5

Months	Deaths			Death Rate Per 1,000 Pop.
	Males	Females	Total	
January ... ..	16,951	14,034	30,985	19·0
February ... ..	12,870	10,568	23,438	15·9
March ... ..	13,209	10,866	24,075	14·8
April ... ..	13,906	11,737	25,643	16·3
May ... ..	16,420	14,116	30,536	18·8
June ... ..	19,251	16,804	36,055	22·9
July ... ..	21,942	19,514	41,456	25·5
August ... ..	20,396	17,459	37,855	23·3
September ... ..	17,964	15,132	33,096	21·0
October ... ..	33,818	28,375	62,193	38·2
November ... ..	19,363	16,695	36,058	22·9
December ... ..	14,757	12,430	27,187	16·7
TOTAL ... ..	220,847	187,730	408,577	25·8

TABLE No. 4.—MONTHLY DEATH RATE PER 1,000 OF POPULATION 1938—1947

Months	1938	1939	1940	1941	1942
January ... ..	25·1	24·1	25·8	33·3	24·6
February ... ..	20·9	18·7	19·9	19·1	24·1
March ... ..	21·2	20·1	21·8	20·6	23·8
April ... ..	20·5	21·0	25·5	22·6	27·8
May ... ..	25·9	27·9	31·8	29·4	34·2
June ... ..	29·0	30·9	32·1	31·1	39·5
July ... ..	34·8	34·9	32·7	32·3	33·9
August ... ..	34·5	31·4	29·0	31·8	28·1
September ... ..	28·4	26·1	24·7	26·1	24·8
October ... ..	25·7	24·9	24·0	24·7	25·1
November ... ..	24·9	25·0	24·2	24·5	25·4
December ... ..	25·8	27·0	26·3	25·4	25·6
<b>TOTAL ... ..</b>	<b>26·4</b>	<b>26·0</b>	<b>26·5</b>	<b>25·9</b>	<b>28·7</b>

Months	1943	1944	1945	1946	1947
January ... ..	26·0	28·0	23·6	25·8	19·0
February ... ..	21·7	23·2	20·9	24·5	15·9
March ... ..	25·1	23·4	22·8	27·3	14·8
April ... ..	26·0	25·3	21·9	27·1	16·3
May ... ..	30·3	29·2	29·1	30·3	18·8
June ... ..	31·8	32·9	36·1	30·9	22·9
July ... ..	33·8	33·7	39·1	29·0	25·5
August ... ..	31·3	29·9	37·3	26·5	23·3
September ... ..	26·3	25·2	31·5	24·1	21·0
October ... ..	29·5	24·3	27·7	22·6	38·2
November ... ..	27·5	23·3	25·0	20·1	22·9
December ... ..	30·0	22·8	27·7	22·0	16·7
<b>TOTAL ... ..</b>	<b>28·3</b>	<b>26·8</b>	<b>28·6</b>	<b>25·8</b>	<b>21·3</b>

TABLE No. 5.—SHOWING THE MEAN BIRTH AND DEATH RATES PER 1,000 OF

Localities	1938			1939			1940			1941			1942		
	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.
Cairo ... ..	42·2	28·1	204	45·0	25·8	190	43·3	26·8	197	45·0	28·8	198	46·3	36·9	247
Alexandria...	42·3	24·7	202	41·8	24·1	197	37·7	22·3	188	28·0	23·3	193	34·4	25·2	204
Ismailia ...	51·6	24·2	205	50·8	23·8	168	53·2	26·9	186	68·6	42·9	235	44·7	38·5	214
Port-Said ...	41·0	20·8	157	38·9	24·1	166	38·7	18·1	131	31·5	21·6	169	38·3	26·5	183
Damietta ...	44·2	22·2	134	42·5	22·5	149	45·1	22·1	148	46·5	23·0	139	41·1	28·8	174
Suez ... ..	51·4	27·6	220	54·1	32·1	245	57·7	31·0	204	47·3	44·0	254	66·1	58·1	288
Frontier Dist.	39·6	17·0	132	37·7	18·0	140	38·1	31·3	136	35·6	31·6	176	32·2	23·3	165
Behera... ..	38·9	22·6	112	37·9	22·5	118	36·9	23·6	126	37·9	25·5	122	30·7	25·0	121
Dakahlia ...	48·7	28·1	159	46·3	29·5	160	64·0	30·5	163	46·4	30·8	157	41·3	34·5	171
Gharbia ...	44·8	27·3	153	43·6	27·3	148	43·9	28·6	151	43·9	36·3	127	39·1	32·9	146
Menoufia ...	44·3	31·5	188	43·4	29·7	168	43·6	32·3	185	44·4	29·3	155	38·9	29·7	195
Kaliubia ...	45·3	32·9	182	44·5	30·0	170	43·7	32·1	182	44·5	30·3	160	41·8	33·5	119
Sharkia ...	45·3	25·5	135	42·1	26·1	138	41·6	35·5	134	41·1	26·6	136	40·1	27·3	136
Aswan ... ..	34·6	24·2	150	34·5	21·7	128	54·5	24·6	144	35·1	24·3	133	30·8	34·1	157
Assiut ... ..	25·3	25·2	157	43·1	28·4	175	43·1	27·0	164	41·0	25·9	154	37·7	28·1	166
Beni Suef ...	40·0	24·3	166	39·5	23·6	153	38·7	21·6	138	37·1	19·7	119	34·9	23·2	144
Fayoum ... ..	45·0	31·0	242	45·3	33·4	231	42·7	30·0	214	41·8	28·1	202	40·5	28·7	196
Gerga ... ..	44·6	23·2	129	41·8	21·6	126	41·8	23·5	132	39·4	20·9	117	34·8	23·0	122
Giza ... ..	45·4	31·3	187	47·1	27·1	173	46·4	28·9	178	45·4	27·8	158	42·6	33·5	196
Minia ... ..	43·2	26·2	182	40·8	27·1	187	40·8	26·8	184	40·0	23·6	160	36·6	25·4	169
Qena ... ..	35·7	19·6	127	32·3	17·3	130	33·3	17·9	123	31·2	17·2	117	27·6	16·9	110
TOTAL ... ..	43·4	26·4	163	42·2	26·0	160	41·6	26·5	162	40·8	25·9	150	38·2	28·7	168

POPULATION AND INFANTILE MORTALITY RATES PER 1,000 BIRTHS.

1943			1944			1945			1946			1947		
Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.
53.1	37.7	237	58.9	36.8	215	60.5	33.8	207	61.9	34.3	200	47.5	21.0	172
44.4	32.7	250	52.7	29.7	217	55.5	34.7	242	66.6	25.9	187	49.8	24.1	192
41.4	41.1	188	70.9	43.9	184	73.7	37.9	168	71.2	35.0	162	74.9	38.0	151
44.9	24.6	182	53.8	28.9	192	53.4	27.5	187	51.1	22.7	159	48.1	17.7	129
40.1	21.4	151	50.8	20.8	147	54.3	26.4	184	52.1	20.2	136	52.1	20.5	131
84.9	73.5	263	90.6	78.7	183	97.3	63.4	244	92.4	54.2	210	53.1	24.2	178
35.3	23.2	174	43.2	22.8	135	48.0	22.1	130	50.0	23.9	155	42.8	15.9	119
35.9	22.7	109	37.9	22.5	107	42.6	24.2	105	40.6	21.3	97	40.0	20.8	111
41.8	30.9	148	45.0	26.0	142	47.1	31.4	159	45.5	26.5	135	47.3	27.1	123
49.7	28.2	137	41.6	24.9	129	43.4	29.4	137	43.7	25.1	119	43.7	24.7	108
40.8	30.4	165	39.6	30.6	171	40.9	31.2	164	39.2	30.5	175	47.7	28.0	142
44.8	29.5	162	43.6	29.4	162	47.2	30.9	155	46.1	30.3	146	49.6	25.4	133
40.4	25.8	126	41.2	26.2	111	42.8	28.1	125	42.0	25.7	120	38.7	23.6	115
20.3	47.1	215	18.6	30.1	135	40.0	19.5	102	33.7	16.5	110	39.6	18.1	111
36.2	25.6	148	36.6	24.7	139	39.4	30.9	140	38.3	26.2	129	40.1	18.4	118
35.9	22.7	138	35.8	20.9	125	34.8	27.5	142	37.7	41.4	107	42.4	18.6	100
40.1	27.9	189	40.0	30.1	191	41.5	29.3	187	38.8	28.3	166	47.1	22.2	139
33.1	22.3	114	33.7	18.6	93	34.3	19.1	89	32.1	19.9	93	36.1	13.1	73
40.5	31.6	172	46.0	29.2	168	48.9	31.1	163	45.2	33.7	175	53.1	24.1	136
37.6	25.6	165	38.3	25.9	157	40.6	34.6	170	35.2	25.9	132	44.3	17.8	113
27.5	21.9	95	22.0	23.8	105	32.5	14.8	77	29.7	15.8	90	32.3	11.5	78
39.6	28.3	160	41.0	26.8	152	43.9	28.6	153	42.6	25.8	141	43.5	21.3	127

TABLE No. 6.—SHOWING BIRTH AND DEATH RETURN FOR ALL EGYPT, 1947.

Localities	Births	Birth Rate Per 1000 Pop.	Deaths	Death Rate Per 1000 Pop.	Infantile Mortality	Inf. Mortali- ty Rate per 1000 Births
Cairo ... ..	99,866	47·5	44,196	21·0	17,213	172
Alexandria ... ..	46,231	49·8	22,380	24·1	8,860	192
Port Said ... ..	85,94	48·1	3,165	17·7	1,105	129
Ismailia ... ..	5,119	74·9	2,597	38·0	771	151
Damietta ... ..	2,798	52·1	1,103	20·5	367	131
Suez ... ..	5,757	43·1	2,624	24·2	1,023	178
GOVERNORATES : TOTAL ... ..	<b>168,365</b>	<b>48·9</b>	<b>76,066</b>	<b>22·1</b>	<b>29,339</b>	<b>174</b>
Frontier Districts ....	<b>7,177</b>	<b>42·8</b>	<b>2,675</b>	<b>15·9</b>	<b>855</b>	<b>119</b>
Behera... ..	49,796	40·0	25,861	20·8	5,516	111
Dakahlia ... ..	67,008	47·3	38,385	27·1	9,258	123
Gharbia ... ..	102,185	43·7	57,732	24·7	11,070	108
Menoufia ... ..	55,843	47·7	32,727	28·0	7,926	142
Kaliubia ... ..	34,093	49·6	17,475	25·4	4,536	133
Sharkia ... ..	52,557	38·7	32,073	23·6	60,70	115
LOWER EGYPT : TOTAL ... ..	<b>361,482</b>	<b>44·0</b>	<b>204,253</b>	<b>24·8</b>	<b>43,366</b>	<b>120</b>
Aswan... ..	11,343	39·6	5,188	18·1	1,255	111
Assiut ... ..	55,386	40·1	25,426	18·4	6,557	118
Beni Suef ... ..	26,010	42·4	11,465	18·6	2,607	100
Fayoum ... ..	31,665	47·1	14,957	22·2	4,388	139
Gerga ... ..	46,602	36·1	16,975	13·1	3,397	73
Giza ... ..	43,682	53·1	19,779	24·1	5,943	136
Minia ... ..	47,085	44·3	18,921	17·8	5,332	113
Qena .. ..	35,760	32·3	12,830	11·5	2,782	78
UPPER EGYPT : TOTAL ... ..	<b>297,533</b>	<b>41·1</b>	<b>125,579</b>	<b>17·3</b>	<b>32,261</b>	<b>108</b>
GRAND TOTAL ... ..	<b>834,557</b>	<b>43·5</b>	<b>408,577</b>	<b>21·3</b>	<b>105,821</b>	<b>127</b>

TABLE No. 7.—SHOWING AGE AND SEX DISTRIBUTION OF DEATHS AND THEIR RATES  
PER 1,000 POPULATION IN 1947.

Age Groups	Deaths						Male ratio to Total %	Female ratio to Total %	Death rate Per cent of total deaths
	Males	rate	Females	rate	Total	rate			
Under 1 year ... ..	56,535	194·3	49,286	164·6	105,821	179·3	25·6	26·3	25·9
1-2 years ... ..	29,024	57·8	27,497	48·7	56,521	53·0	13·1	14·6	13·8
2-3 „ ... ..	14,308		13,680		27,988		6·5	7·3	6·9
3-4 „ ... ..	6,238		5,256		11,494		2·8	2·8	2·8
4-5 „ ... ..	3,901		3,366		7,267		1·8	1·8	1·8
5-10 „ ... ..	7,192	5·5	5,584	4·2	12,776	4·8	3·3	3·0	3·1
10-15 „ ... ..	5,752	4·7	3,744	3·5	9,496	4·1	2·6	2·0	2·3
15-20 „ ... ..	5,082	6·0	3,185	4·1	8,267	5·1	2·3	1·7	2·0
20-25 „ ... ..	4,788	7·5	2,919	4·2	7,707	5·8	2·2	1·6	1·9
25-30 „ ... ..	5,893	8·0	4,309	5·1	10,202	6·5	2·7	2·3	2·5
30-35 „ ... ..	6,717	10·1	5,674	7·3	12,391	8·6	3·0	3·0	3·0
35-40 „ ... ..	8,162	11·4	5,294	8·0	13,456	9·8	3·7	2·8	3·3
40-45 „ ... ..	8,078	14·3	5,608	9·7	13,686	12·0	3·7	3·0	3·3
45-50 „ ... ..	6,533	15·9	3,624	9·5	10,157	12·8	3·0	1·9	2·5
50-55 „ ... ..	8,545	21·7	5,675	13·9	14,220	17·7	3·9	3·0	3·5
55-60 „ ... ..	3,785	22·0	1,897	11·6	5,682	16·9	1·7	1·0	1·4
60-65 „ ... ..	7,626	31·8	5,374	19·1	13,000	24·9	3·5	2·9	3·2
65-70 „ ... ..	4,203	48·9	2,591	29·2	6,794	38·9	1·9	1·4	1·7
70-75 „ ... ..	7,618	63·5	6,244	42·0	13,862	51·6	3·4	3·3	3·4
75-80 „ ... ..	3,147	98·4	2,409	68·4	5,556	82·7	1·4	1·3	1·4
80-85 „ ... ..	6,394	137·7	7,359	104·5	13,853	117·6	2·9	4·0	3·4
85-90 „ ... ..	1,915		2,096		4,011		0·9	1·1	1·0
90-95 „ ... ..	4,938	384·8	7,366	401·6	12,304	394·8	2·2	3·9	3·0
95 and over ... ..	4,282		7,544		11,826		1·9	4·0	2·9
Not stated ... ..	191	8·8	49	2·1	240	5·3	0·09	0·03	0·06
TOTAL ... ..	220,847	23·3	187,730	19·4	408,577	21·3	—	—	—

TABLE NO. 8.—SHOWING DISEASE DISTRIBUTION OF INFANTILE DEATHS UNDER ONE YEAR OF AGE IN LOCALITIES

Diseases of Infancy	Infantile deaths under one year									
	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Measles ... ..	166	255	278	228	395	99	262	151	360	200
Whooping Cough ... ..	15	16	14	22	28	43	32	28	13	18
Diphtheria ... ..	26	28	37	70	68	81	59	85	59	57
Tuberculous diseases ... ..	10	8	12	5	13	19	24	11	23	14
Syphilis ... ..	282	274	240	161	150	234	165	130	135	121
Rickets and Osteomalacia... ..	310	249	227	189	189	183	180	176	128	132
Convulsions ... ..	145	144	154	173	198	200	252	213	134	98
Bronchitis ... ..	2,674	2,620	3,089	3,195	3,636	3,522	3,705	4,211	3,742	3,947
Broncho-Pneumonia ... ..	2,358	2,310	1,749	794	936	1,036	1,095	959	1,145	950
Pneumonia ... ..	1,197	1,223	645	200	277	301	347	393	497	536
Diarrhoea and Enteritis ... ..	23,207	23,979	25,279	25,325	31,099	33,230	33,647	37,173	34,086	33,030
Congenital Defects of Conformation...	69	62	71	73	81	78	137	199	150	91
Congenital Debility ... ..	12,940	13,517	13,107	13,007	14,773	16,895	17,881	20,318	18,786	18,191
Premature Birth ... ..	154	170	234	165	168	195	151	128	167	123
Consequences of Delivery ... ..	44	62	63	66	47	80	74	113	132	138
Infanticide ... ..	165	149	133	168	161	126	119	86	100	72
Accidents ... ..	106	138	106	152	109	96	122	113	88	109
Other Causes ... ..	1,503	1,612	1,652	1,546	1,585	1,841	1,983	1,909	1,475	1,553
TOTAL ... ..	45,371	46,816	47,090	45,539	53,913	58,259	60,235	66,396	61,220	59,380

ING A HEALTH BUREAU, AND INFANTILE MORTALITY RATES PER 1,000 LIVE BIRTHS. (1938 1947)

Infantile Mortality rates per 1,000 live births.									
1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
0.753	1.1	1.2	0.981	1.6	0.365	0.877	0.468	1.1	0.566
0.068	0.068	0.059	0.095	0.115	0.159	0.107	0.087	0.040	0.051
0.118	0.120	0.156	0.301	0.279	0.299	0.198	0.264	0.18	0.161
0.045	0.034	0.051	0.022	0.053	0.070	0.080	0.034	0.070	0.04
1.3	1.2	1.0	0.693	.616	0.864	0.552	0.403	0.413	0.343
1.4	1.0	0.958	0.814	0.776	0.676	0.603	0.546	0.391	0.374
0.657	.615	0.65	0.745	0.814	0.738	0.844	0.66	0.41	0.277
12.1	11.2	13.0	13.8	14.9	13.0	12.4	13.1	11.4	11.2
10.7	9.9	7.4	3.4	3.8	3.8	3.7	3.0	3.5	2.7
5.4	5.2	2.7	0.861	1.1	1.1	1.2	1.2	1.5	1.5
105.2	102.5	106.4	109.0	127.6	122.7	112.6	115.2	104.2	93.5
0.313	0.265	.300	.314	.332	.288	.459	.617	.458	.258
58.7	57.8	55.3	56.0	60.6	62.4	59.6	63.0	57.4	51.5
.698	.727	.988	.710	.690	.720	.505	.397	.510	.348
.200	.265	.266	.284	.192	.295	.248	.350	.403	.391
.748	.637	.561	.723	.661	.465	.398	.267	.306	.204
.481	.590	.447	.654	.447	.354	.408	.350	.269	.309
6.8	6.9	7.0	6.7	6.5	6.8	6.6	5.9	4.5	4.4
205.7	200.1	198.8	196.0	231.3	215.1	201.6	205.8	187.1	168.1

TABLE NO. 9.—SHOWING AGE AND DISEASE DISTRIBUTION OF INFANTILE DEATHS

Cause of Deaths	Weeks				
	Below 1 week	1-2	2-3	3-4	4-1 month
Measles ... ..	0	0	0	0	0
Whooping Cough ... ..	0	0	0	0	0
Diphtheria ... ..	1	0	0	0	0
Tuberculous diseases ... ..	0	1	0	1	0
Syphilis ... ..	38	18	5	5	0
Rickets and Osteomalacia ... ..	2	1	1	0	0
Convulsions ... ..	7	3	1	2	0
Bronchitis ... ..	32	32	49	32	2
Broncho-Pneumonia ... ..	15	16	12	9	0
Pneumonia ... ..	26	21	10	8	1
Diarrhoea and Enteritis ... ..	126	186	220	168	18
Congenital Defects of Conformation ... ..	27	12	10	5	0
Congenital Debility ... ..	4,787	2,613	1,760	861	90
Pemature Birth ... ..	98	10	4	2	0
Consequences of Delivery ... ..	110	9	0	0	0
Infanticide ... ..	69	0	0	1	0
Accidents ... ..	10	3	5	0	0
Other Causes ... ..	145	79	68	18	2
<b>TOTAL ... ..</b>	<b>5,493</b>	<b>3,004</b>	<b>2,145</b>	<b>1,112</b>	<b>113</b>

UNDER ONE YEAR OF AGE IN LOCALITIES HAVING A HEALTH BUREAU, 1947

Months											TOTAL
1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
5	2	9	5	10	29	24	27	40	28	21	200
1	1	2	0	2	2	3	3	1	2	1	18
1	0	0	0	2	8	10	14	3	12	6	57
3	0	1	0	0	2	3	1	0	1	1	14
6	6	7	4	4	10	4	8	3	1	2	121
7	6	8	5	10	17	15	11	19	24	6	132
8	6	2	14	13	8	8	12	6	3	5	98
208	332	373	351	387	486	358	458	349	288	210	3947
49	56	70	70	84	102	91	130	93	105	48	950
24	26	38	47	54	58	47	66	49	41	20	536
,676	2,561	3,322	3,807	3,439	4,116	3,161	3,685	2,582	2,533	1,430	33,030
23	2	4	2	0	0	1	3	1	1	0	91
,475	1,940	1,367	758	441	351	211	227	154	109	47	18,191
5	1	1	0	0	0	1	1	0	0	0	123
3	1	1	0	1	0	2	0	11	0	0	138
1	0	0	0	0	0	0	0	1	0	0	72
3	7	6	8	10	14	8	20	6	7	2	109
77	85	117	139	140	170	120	169	88	100	36	1,553
,575	5,032	5,328	5,210	4,597	5,373	4,067	4,835	3,406	3,255	1,835	59,380

**TABLE NO. 10.—SHOWING DISTRIBUTION OF STILL BIRTHS AND THEIR RATIOS  
PER 1,000 BIRTHS, 1947.**

LOCALITIES	Still Births			Ratio per 1,000 of Total Births		
	Males	Females	TOTAL	Males	Females	TOTAL
Cairo ... ..	1,175	869	2,044	22·3	17·6	20·1
Alexandria ... ..	328	258	586	13·7	11·3	12·5
Ismailia ... ..	22	19	51	12·1	7·5	9·9
Port-Said ... ..	112	106	218	24·9	24·6	24·8
Damietta ... ..	52	33	85	35·5	23·3	29·5
Suez... ..	72	43	115	14·2	15·3	14·6
<b>TOTAL GOVERNORATES ... ..</b>	<b>1,808</b>	<b>1,344</b>	<b>3,152</b>	<b>19·7</b>	<b>15·5</b>	<b>17·6</b>
<b>FRONTIER DISTRICTS ... ..</b>	<b>37</b>	<b>16</b>	<b>53</b>	<b>11·5</b>	<b>4·4</b>	<b>7·8</b>
Behera ... ..	156	118	274	6·1	4·8	5·5
Dakahlia ... ..	192	150	342	5·6	4·6	5·1
Gharbia ... ..	277	184	461	5·3	3·7	4·5
Menoufia ... ..	166	114	280	5·8	4·2	5·0
Kaliubia ... ..	73	52	125	4·2	3·1	3·7
Sharkia ... ..	105	76	181	3·8	3·0	3·4
<b>TOTAL LOWER EGYPT ... ..</b>	<b>969</b>	<b>694</b>	<b>1,663</b>	<b>5·2</b>	<b>3·9</b>	<b>4·6</b>
Aswan ... ..	54	23	77	9·0	4·3	6·7
Assiut ... ..	132	85	217	4·5	3·3	3·9
Beni Suef ... ..	92	67	159	6·7	5·4	6·1
Fayoum ... ..	115	76	191	6·3	5·6	6·0
Gerga ... ..	89	44	133	3·4	2·2	2·8
Giza ... ..	76	70	146	3·2	3·5	3·3
Minia ... ..	87	59	146	3·6	2·6	3·1
Qena ... ..	50	30	80	2·5	1·9	2·2
<b>TOTAL UPPER EGYPT ... ..</b>	<b>695</b>	<b>454</b>	<b>1,149</b>	<b>4·3</b>	<b>3·3</b>	<b>3·8</b>
<b>GENERAL TOTAL ... ..</b>	<b>3,472</b>	<b>2,492</b>	<b>5,964</b>	<b>7·9</b>	<b>6·2</b>	<b>7·1</b>

## Chapter II—INFECTIOUS DISEASES.

A total of 51,846 cases with 6,168 deaths of infectious diseases (other than cholera) were notified throughout Egypt during 1947 or a case-rate of 270.45 and a death-rate of 32.18 per 100,000 population and a case fatality-rate of 11.9 per cent, as compared with 176,952 cases with 15,917 deaths notified during 1946, *i.e.* a case rate of 975.3 and a death rate of 87.73 per 100,000 population and a case-fatality-rate of 9.0 per cent.

The outstanding features about the incidence of infectious diseases in Egypt during the year 1947 were :

- (1) The appearance of cholera in Egypt.
- (2) The abrupt fall in the incidence of relapsing fever.
- (3) The steady fall in the incidence of typhus.
- (4) The fall in the incidence of small-pox, plague, diphthera and measles.

### CHOLERA IN 1947

During the year, cholera broke out in Egypt in an epidemic form for the first time since 1902. The first case was reported on September 22nd, 1947, at Korain Village, Sharkia province. From there the epidemic spread to the other localities of the same province and thence to all other parts of Egypt except Aswan. The last case was notified on December 31st, from Cairo.

A special committee was convened to study the epidemic and submit a complete report.

### RELAPSING FEVER

The following table No. 11 gives the number of cases and deaths, the case-rate per 100,000 of population and the case-fatality-rate per cent from the beginning of the epidemic in 1944 until 1947.

TABLE No. 11

Year	Cases	Deaths	Case-rate per 100,000 population	Case- fatality-rate per-cent
1944 ... ..	10	—	.057	—
1945 ... ..	18,126	881	95.55	4.86
1946 ... ..	110,405	2,414	608.00	2.2
1947 ... ..	229	30	1.2	13.1

The great fall in the incidence of the disease in 1947 is attributed to the following :

- (1) The continuous dusting of the population with D.D.T. carried out by dusting gangs which were distributed throughout the country.
- (2) The treatment of the sick in their homes by mobile treatment units touring the villages. Table No. 23 shows that :
  - a. The highest case-rate was in lower Egypt provinces especially in Behera and Dakahlia.
  - b. The largest number of cases reported was 132 during first quarter of the year, 80 during the second, 16 during the third and one case during the fourth quarter.

## TYPHUS

The following table No. 12 gives the number of cases and deaths from typhus, the case-rate per 100,000 population and the case-fatality-rate per cent during the years 1942-1947.

TABLE No. 12

Year	Cases	Deaths	Case-rate per 100,000 population	Case- fatality-rate per cent.
1942 ... ..	22,054	4,411	128.02	20.00
1943 ... ..	40,182	8,252	230.6	20.54
1944 ... ..	18,477	4,043	104.8	21.88
1945 ... ..	18,283	3,627	102.0	19.84
1946 ... ..	1,548	337	8.5	21.8
1947 ... ..	174	52	.90	28.7

The apparent fall in the incidence of the disease in 1947 is attributed to the control measures followed in connection with the relapsing fever epidemic.

The rise in the case-fatality-rate is of no significance since it involves small numbers.

Table No. 24 shows that the highest case rate was in Port-Said. Table No. 33 gives the number of persons vaccinated against the disease.

## PLAGUE

During the year 1947, a total of 15 cases with five deaths, all from Alexandria, were recorded. The first case was reported on 28th April, 1947 and the last on 31st July, 1947.

14 of the cases were bubonic and only one, a fatal case, was septicaemic.

The following table No. 13 gives the number of cases and deaths from plague, the case-rate per 100,000 population and the case-fatality-rate per cent during the years 1942-1947.

TABLE No. 13

Year	Cases	Deaths	Case-rate per 100,000 population	Case- fatality rate per cent.
1942 ... ..	15	10	.087	66.6
1943 ... ..	163	111	.936	68.1
1944 ... ..	644	393	3.65	61.02
1945 ... ..	218	108	1.22	49.54
1946 ... ..	211	57	1.2	27.00
1947 ... ..	15	5	.078	33.3

This table shows that the incidence of the disease reached a low level in 1947.

Table No. 33 gives the number of persons vaccinated against the disease during the year under review.

## SMALL-POX

The following table No. 14 gives the number of cases and deaths from Small Pox, the case-rate per 100,000 population, and the case-fatality-rate per cent during the years 1942-1947.

TABLE No. 14

Year	Cases	Deaths	Case-rate per100,000 population	Case- fatality-rate per cent.
1942 ... ..	—	—	—	—
1943 ... ..	4,138	384	23.75	9.28
1944 ... ..	11,194	1016	63.51	9.08
1945 ... ..	1,355	115	7.56	8.49
1946 ... ..	416	50	2.2	12.5
1947 ... ..	170	18	.887	10.6

The table shows that the incidence of the disease is on the decline since 1944. This was due to the procedure adopted in 1945 of vaccinating one quarter of the population each year i.e. a four yearly vaccination of the whole population.

According to table No. 25, no cases of small-pox were reported in Upper Egypt, except in Qena province where cases were reported among the nomad Arabs whom it is difficult to vaccinate because they are always on the move.

Table No. 33 gives the number of persons vaccinated against small-pox.

### TYPHOID

The following table No. 15 gives the number of cases and deaths from typhoid and paratyphoid, the case-rate per 100,000 of population and the case-fatality-rate per cent during the years 1942-1947.

TABLE No. 15

Year	Cases	Deaths	Case-rate per 100,000 population	Case- fatality-rate per cent.
1942 ... ..	6,814	1,257	39.55	18.45
1943 ... ..	4,431	790	25.43	17.83
1944 ... ..	5,019	790	28.48	15.74
1945 ... ..	5,286	833	29.49	15.76
1946 ... ..	4,584	637	25.2	13.9
1947 ... ..	4,601	681	24.0	14.6

A slight increase in the incidence of the disease in 1947 is noted.

According to table No. 26, the highest incidence occurred during the third quarter. The highest case rate was observed in Port-Said. The following table No. 16 shows the cases, deaths and the case-rate per 100,000 of population in Port-Said during the years 1942-1947.

TABLE No. 16

Year	Cases	Deaths	Case-rate per100,000 population	Case- fatality-rate per cent.
1942 ... ..	307	30	226,900	9.8
1943 ... ..	332	29	240,405	9.
1944 ... ..	259	22	183,818	8.5
1945 ... ..	346	24	239,446	7.
1946 ... ..	396	20	267,832	5.
1947 ... ..	588	38	329,882	6.4

The persistent rise in the incidence of the disease in Port-Said is due to the dirty environment especially :

- (1) The inadequacy of the drainage system to cope with the ever growing population and the frequent overflowing of the drains.
- (2) The large number of houses which are not connected to the drainage system and the constant over-flowing of their cesspits due to the high level of subsoil water.
- (3) The insanitary condition of Manach quarter where cattle, pigs, etc., are bred and where the refuse dumps form favourable breeding places for flies.

Table No. 33 gives the number of persons vaccinated against the disease.

### DIPHTHERIA

1,820 cases of Diphtheria with 586 deaths were reported during 1947 or a case-rate of 9.44 and a death-rate of 3.0 per 100,000 population and a case-fatality-rate of 32.1 per cent, as against 2,047 cases with 823 deaths in 1946 or a case-rate of 11.2 and a death rate of 4.5 per 100,000 population and a case-fatality-rate of 40.2 per cent.

The fewer cases in 1947 are due to the ever increasing number of districts to which the anti-diphtheria vaccination law is applied.

Table No. 27 shows that the case-rate in the governorates is higher than in the provinces. This may be due to a more appreciation of notification in the former.

Table No. 33 gives the number of persons vaccinated against the disease.

### CEREBRO SPINAL FEVER

97 cases with 32 deaths were reported during 1947 or a case-rate of 0.49 and a death-rate of 0.168 per 100,000 population and a case-fatality rate of 34.0 per cent as against 88 cases with 44 deaths in 1946 and a case-rate of 0.48 and a death rate of 0.243 per 100,000 population and a case-fatality-rate of 50 per cent.

Table No. 28 shows that most of the cases were reported from the large towns where overcrowding in public meetings takes place.

### WHOOPIING COUGH

The following table No. 17 gives the number of cases and deaths, the case-rate per 100,000 population and the case-fatality-rate per cent during the years 1942-1947.

TABLE No. 17

Year	Cases	Deaths	Case-rate per-100,000 population	Case- fatality-rate per cent
1942 ... ..	2,257	142	13.11	6.29
1943 ... ..	2,054	105	11.79	5.11
1944 ... ..	1,208	105	6.85	8.69
1945 ... ..	1,856	92	10.36	4.96
1946 ... ..	904	54	5.00	5.97
1947 ... ..	2,189	64	11.42	2.8

This shows a slight increase in the case-rate in 1947.

The increase was marked in Aswan during the first quarter of the year (table No. 29).

### MEASLES

A total of 6,890 cases of measles with 1,336 deaths were recorded during 1947 or a case-rate of 35.9 and a death rate of 6.9 per 100,000 population and a case-fatality-rate of 19.3 per cent as against 6,969 cases with 1,826 deaths during 1946 and a case rate of 38.4 and a death-rate of 9.5 per 100,000 population and a case fatality rate of 26.2 per cent. Most of the cases were reported during the first half of the year (table No. 30).

TABLE No. 18 — SHOWING CASES OF INFECTION

Localities	Plague		Typhus		Small-Pox		Relapsing fever	
	46	47	46	47	46	47	46	47
Cairo ... ..	—	—	142	49	20	10	11,918	14
Alexandria ... ..	124	15	24	15	7	1	5,489	2
Ismailia ... ..	32	—	—	—	—	—	788	—
Port Said ... ..	15	—	75	18	6	—	1,127	1
Damietta ... ..	—	—	3	1	—	—	41	—
Suez ... ..	24	—	16	1	2	—	828	—
Frontier Districts ... ..	6	—	15	2	4	2	584	48
Behera... ..	—	—	380	18	109	5	5,879	51
Dakahlia ... ..	4	—	11	15	19	14	6,755	46
Gharbia ... ..	—	—	452	12	89	113	11,470	32
Menoufia ... ..	—	—	82	3	81	1	9,368	3
Kaliubia ... ..	—	—	12	14	4	3	3,110	3
Sharkia ... ..	6	—	134	14	15	4	5,743	1
Aswan ... ..	—	—	53	—	—	—	589	—
Assiut ... ..	—	—	16	1	—	—	10,454	—
Beni Suef ... ..	—	—	—	—	34	—	1,199	—
Fayoum ... ..	—	—	—	—	—	—	5,671	—
Gerga ... ..	—	—	3	1	1	—	6,333	21
Giza ... ..	—	—	12	5	5	—	11,424	6
Minia ... ..	—	—	3	2	—	—	5,870	7
Qena ... ..	—	—	7	3	20	17	5,765	—
TOTAL ... ..	211	15	1,548	174	416	170	110,405	229

EASES NOTIFIED DURING 1946 AND 1947.

Typhoid fever		Scarlet fever		Cerebro Spinal fever		Diphtheria		Measles		Pulmonary tuberculosis		Pneumonia		Chicken Pox	
46	47	46	47	46	47	46	47	46	47	46	47	46	47	46	47
2,373	2,050	3	2	45	72	991	980	1,635	1,000	2,986	3,232	2,825	2,226	393	869
562	669	5	6	31	12	309	306	138	2,389	1,403	1,296	1,390	2,443	228	403
14	25	—	—	—	—	5	8	1	2	1	8	1	6	—	2
398	588	—	—	3	2	41	36	80	32	202	204	89	176	22	65
19	30	—	—	—	—	5	6	—	1	53	16	17	28	3	2
59	76	2	—	2	1	29	15	43	8	88	72	132	64	4	8
46	37	—	—	—	—	16	2	176	450	15	12	125	35	8	12
83	122	—	—	—	—	58	42	225	343	80	151	108	60	19	28
84	99	—	1	1	1	88	43	254	252	248	202	39	84	7	21
119	158	—	—	1	3	101	55	262	455	358	331	89	102	28	38
85	65	1	1	—	—	56	39	1,049	394	102	106	32	25	17	31
64	61	—	—	1	2	71	50	378	124	103	116	52	52	13	37
90	87	—	—	1	3	41	31	245	86	135	105	21	36	35	87
7	10	—	—	—	—	12	21	6	81	76	65	8	15	6	4
229	233	—	—	1	—	39	33	516	112	121	115	121	207	6	14
12	26	—	—	—	—	25	8	77	3	41	41	4	6	16	23
8	7	—	—	—	—	5	3	117	93	78	137	21	47	6	13
68	41	—	—	—	—	7	13	273	120	20	40	52	38	11	21
173	124	—	—	2	1	95	85	1,030	400	170	144	236	97	25	65
42	56	—	—	—	—	9	32	294	354	76	91	30	34	13	3
39	37	—	—	—	—	44	12	169	191	51	39	30	21	13	11
584	4,601	11	10	88	97	2,047	1,820	6,968	6,890	6,407	6,523	5,420	5,797	873	1,755

TABLE NO. 18.—SHOWING CASES OF INFECTIOUS

Localities	Puerperal Sep.		Dysentery		Influenza		Malaria New		Malaria Relapse	
	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	87	120	197	215	4,634	421	212	434	50	120
Alexandria ... ..	82	105	195	322	5,712	300	208	209	—	—
Ismailia ... ..	—	—	—	2	15	88	6	13	—	—
Port Said ... ..	5	2	48	36	578	616	57	97	—	—
Damietta ... ..	1	1	—	3	72	49	8	21	—	—
Suez... ..	2	1	57	49	363	179	132	52	73	27
Frontier Districts ... ..	5	—	157	124	246	85	341	260	—	—
Behera ... ..	6	9	23	10	329	155	2,410	2,659	1	—
Dakahlia... ..	9	3	9	10	298	144	485	126	25	1
Gharbia ... ..	16	9	92	80	1,537	319	2,148	970	1,519	489
Menoufia... ..	—	1	27	36	524	123	63	73	—	2
Kaliubia ... ..	5	1	8	23	452	236	626	714	32	13
Sharkia ... ..	2	5	5	19	247	105	683	473	9	3
Aswan ... ..	1	2	39	89	113	36	29	95	991	—
Assiut ... ..	17	11	64	74	384	366	4	5	199	—
Beni Suef ... ..	3	3	55	6	52	37	34	10	1	—
Fayoum ... ..	4	9	20	3	4	14	1,622	361	1,781	2,70
Gerga ... ..	1	1	7	5	242	46	25	20	381	—
Giza ... ..	5	11	41	41	998	142	109	100	—	—
Minia ... ..	6	14	62	140	556	9	52	50	—	—
Qena ... ..	9	2	24	72	214	154	8	5	124	—
<b>TOTAL ... ..</b>	<b>266</b>	<b>310</b>	<b>1,130</b>	<b>1,359</b>	<b>17,570</b>	<b>5,711</b>	<b>9,262</b>	<b>6,747</b>	<b>5,686</b>	<b>3,30</b>

DISEASES NOTIFIED DURING 1946 AND 1947 (contd.)

Anthrax		Whooping cough		Parotitis		Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas	
46	47	46	47	46	47	46	47	46	47	46	47	46	47	46	47
—	—	70	314	347	725	7	11	2	4	56	85	—	7	220	309
—	1	96	138	455	235	11	1	13	6	73	59	2	7	440	549
—	—	—	—	—	3	—	—	—	—	1	3	—	1	3	—
—	—	1	9	20	29	—	—	4	1	13	16	—	1	82	66
—	—	1	21	—	12	3	—	—	—	4	2	—	—	2	9
—	—	10	8	22	19	—	—	7	—	2	2	—	—	13	10
—	1	9	128	67	162	—	—	—	—	1	—	—	—	5	—
1	—	115	74	29	327	—	—	3	4	49	34	—	—	26	53
2	—	4	188	24	23	—	—	8	21	13	25	—	—	71	70
2	2	62	40	28	80	1	1	2	8	70	39	—	1	117	136
—	—	154	77	12	11	—	—	39	26	27	31	—	—	45	64
—	1	14	32	41	43	—	—	3	4	17	7	—	—	26	34
—	1	16	25	39	11	—	—	3	10	14	19	—	1	39	41
—	—	2	548	24	6	—	—	4	1	3	5	—	—	2	2
—	—	131	88	13	21	—	—	3	11	24	28	—	—	16	33
—	—	1	2	23	72	—	—	1	3	12	8	—	—	10	5
—	2	12	5	54	10	—	—	4	3	11	14	—	—	18	11
—	—	65	36	10	4	—	—	11	19	7	5	—	—	9	11
1	1	120	216	62	30	—	1	5	1	11	21	—	5	13	33
—	—	20	66	16	56	—	—	4	23	20	35	—	—	18	15
—	—	1	174	4	1	—	—	8	17	7	4	—	—	6	6
6	9	904	2,189	1,290	1,880	22	11	124	162	435	443	2	23	1,181	1,459

TABLE NO. 19.—SHOWING CASES AND DEATHS OF INFECTIOUS DISEASES NOTIFIED THROUGHOUT EGYPT

		1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Plague ... ..	C	11	169	1,491	14	15	163	644	218	211	15
	D	6	59	238	6	10	111	393	108	57	5
Typhus ... ..	C	2,811	4,296	4,416	9,414	22,045	40,182	18,477	18,283	1,548	174
	D	405	788	863	1,751	4,411	8,252	4,043	3,627	337	52
Small Pox ... ..	C	1	0	2	0	0	4,138	11,194	1,355	416	17
	D	0	0	0	0	0	384	1,016	115	50	18
Typhoid ... ..	C	4,171	4,686	4,841	5,758	6,814	4,431	5,019	5,286	4,584	4,601
	D	1,104	1,121	934	1,179	1,257	790	790	833	637	681
Scarlet Fever... ..	C	50	81	105	91	39	54	30	12	11	10
	D	2	5	3	0	2	3	0	1	0	2
Cerebro Spinal Fever ... ..	C	189	243	191	159	212	114	174	65	88	97
	D	125	137	96	94	101	57	75	49	44	32
Diphtheria ... ..	C	1,686	1,962	2,433	4,037	3,950	4,143	3,326	3,130	2,047	1,820
	D	749	905	1,178	1,932	1,882	1,595	1,264	1,159	823	586
Measles ... ..	C	9,593	10,588	14,967	9,769	9,764	4,249	7,274	5,444	6,968	6,890
	D	2,346	2,795	3,581	2,870	3,654	1,022	2,475	1,413	1,826	1,336
Pulmonary T.B. ... ..	C	5,675	6,326	6,236	6,296	6,608	6,770	6,950	6,819	6,407	6,523
	D	2,501	2,652	2,786	3,029	3,472	3,647	3,803	3,681	3,671	3,582
Acute Pneumonia... ..	C	0	0	3,545	5,414	6,215	6,935	6,929	5,805	5,420	5,797
	D	0	0	4,939	4,843	5,296	5,762	5,242	4,848	4,432	3,960
Chicken Pox ... ..	C	1,479	1,817	1,351	1,862	870	1,238	1,057	1,338	873	1,755
	D	12	22	15	15	8	21	15	12	11	7
Puerperal Septicaemia... ..	C	402	463	489	461	332	375	375	387	266	310
	D	275	321	340	344	208	187	158	178	145	101
Dysentery ... ..	C	2,622	2,387	2,205	3,447	3,553	1,872	1,672	1,217	1,130	1,359
	D	452	377	385	509	577	604	537	384	329	245
Influenza ... ..	C	8,509	8,221	9,763	11,120	12,965	14,056	11,203	14,642	17,570	5,711
	D	245	179	180	178	218	219	204	252	67	48
Malaria New ... ..	C	0	0	0	0	0	0	37,847	5,887	9,262	6,747
	D	17,611	14,527	13,444	9,320	20,937	16,530	1,867	56	22	33
,, Recurrent ... ..	C	068	62	68	104	394	1,341	218231	141557	5,686	3,365
	D	0	0	0	0	0	0	14	19	4	1
Anthrax ... ..	C	11	16	22	22	21	15	13	4	6	9
	D	3	4	5	5	4	9	2	2	1	1
Whooping Cough ... ..	C	2,523	1,462	3,238	2,923	2,257	2,054	1,208	1,856	904	2,189
	D	153	62	172	173	142	105	105	92	54	63
Parotitis ... ..	C	1,895	1,962	1,704	1,755	1,453	1,449	1,063	1,743	1,290	1,880
	D	18	28	27	19	30	31	30	27	13	9
Undulant Fever ... ..	C	20	38	27	20	9	6	20	15	22	11
	D	4	3	2	0	2	4	3	2	2	1
Leprosy ... ..	C	533	661	545	511	520	393	224	332	124	162
	D	75	61	69	79	82	68	58	53	55	51
Tetanus ... ..	C	483	478	476	433	459	442	544	439	435	441
	D	310	294	310	314	313	294	331	303	354	301
Acute Poliomyelitis ... ..	C	8	4	16	16	5	7	11	7	2	2
	D	5	3	6	9	1	2	4	6	6	1
Erysipelas ... ..	C	4,127	4,450	4,827	4,502	3,100	1,956	1,671	1,551	1,181	1,451
	D	637	536	466	468	312	209	156	146	88	8
Relapsing Fever ... ..	C	0	0	1	0	0	0	10	18,126	110405	22
	D	0	0	0	0	0	0	0	881	2,414	3

URING 1938-1947 AND CASE AND DEATH RATES PER 100,000 POPULATION.

1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
.068	1.02	2.9	.082	.087	.936	3.7	1.2	1.2	.078
.036	.357	1.4	.035	.058	.937	2.2	0.603	.314	.026
7.3	26.0	26.3	55.3	128.0	230.9	104.8	102.0	8.5	.902
2.5	4.8	5.1	10.3	25.6	47.4	22.9	20.2	1.9	.271
.006	0	.012	0	0	23.8	63.5	7.6	2.2	.887
0	0	0	0	0	2.2	5.8	.642	.276	.094
5.7	28.4	28.9	33.8	39.6	25.4	28.5	29.5	25.2	24.0
3.8	6.8	5.6	9.6	7.3	4.5	4.5	4.6	3.5	9.3
.308	.491	.626	.534	.226	.310	.17	.067	.06	.052
.012	.03	.018	0	.012	.017	0	.006	0	.01
1.06	1.5	1.1	.934	1.2	.654	.834	.363	.48	.49
.77	.83	.572	.552	.586	.347	.426	.273	.243	.167
0.4	11.9	14.5	23.8	22.3	23.8	18.9	17.5	11.2	9.4
4.6	5.5	7.0	11.3	10.9	9.2	7.2	6.5	4.5	3.1
9.1	64.1	89.2	57.3	56.7	24.4	41.3	30.4	38.4	35.9
4.4	16.9	21.3	16.9	21.2	5.9	14.0	7.9	9.5	7.
4.9	38.3	37.2	36.9	38.4	38.9	39.4	38.1	35.3	34.0
5.4	16.1	16.6	17.8	20.2	20.9	21.6	20.5	20.2	18.7
0	0	21.1	31.8	36.0	39.8	39.3	32.4	29.9	30.2
0	0	29.4	28.4	30.7	33.1	29.7	27.0	24.4	20.7
9.11	11.0	8.0	10.9	5.1	7.11	6.0	7.5	4.8	9.2
.074	.133	.089	.088	.046	.12	.085	.067	.061	.037
2.5	2.8	2.9	2.7	1.9	2.2	2.03	2.2	1.5	1.6
1.7	1.9	2.0	2.0	1.2	1.1	.896	.993	.799	.527
3.2	14.5	13.2	20.2	20.6	10.7	9.5	6.8	6.2	7.1
2.8	2.3	2.3	3.0	3.3	3.5	3.0	2.1	1.8	1.3
2.4	49.8	58.2	65.3	75.3	80.8	63.6	81.7	96.8	29.8
1.5	1.1	1.1	1.1	1.3	1.3	1.2	.848	.369	.219
0	0	0	0	0	0	214.7	32.9	51.1	35.2
8.5	88.0	80.2	54.7	121.5	94.9	10.6	.312	.121	.172
.419	.376	.405	.611	2.3	7.7	1238.2	789.8	31.3	17.6
0	0	0	0	0	0	.079	.106	.022	.005
.068	.097	.131	.129	.122	.086	.074	.022	.03	.047
.018	.376	.030	.03	.023	.052	.011	.011	.006	.005
.5	8.9	19.3	17.2	13.1	11.8	6.9	10.4	5.0	11.4
.942	.024	1.0	1.02	.824	.603	.596	.513	.298	.329
.7	11.9	10.2	10.3	8.4	8.3	6.03	9.7	7.1	9.8
.11	.17	.16	.112	.174	.178	.17	.151	.072	.074
.123	.023	.161	.117	.052	.034	.113	.084	.12	.06
.025	.018	.012	.012	.012	.023	.017	.04	.011	.005
.378	4.0	3.3	3.0	3.0	2.3	1.3	1.9	.68	.845
.462	.376	.411	.464	.476	.39	.326	.296	.303	.266
.9	2.9	2.8	2.5	2.7	2.5	3.1	2.5	2.4	2.3
.9	1.8	1.8	1.8	1.8	1.7	1.9	1.7	2.0	1.6
.049	.024	.095	.094	.029	.040	.062	.039	.01	.119
.03	.018	.036	.053	.006	.011	.023	.033	.033	.073
.4	26.9	28.8	26.4	18.0	11.2	9.5	8.7	6.5	7.6
.9	3.2	2.8	2.7	1.8	1.2	.885	.815	.485	.464
0	0	.006	0	0	0	.057	95.6	.608	1.2
0	0	0	0	0	0	0	4.9	13.3	.156

TABLE NO. 20.—SHOWING INFECTIOUS DISEASES CASE-RATE

Localities	Plague		Typhus		Small Pox		Relapsing fever		Typhoid fever	
	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	0	0	9.3	2.3	1.3	.476	777.7	.667	154.8	97.
Alexandria ... ..	15.7	1.9	3.0	1.6	.884	.108	693.1	.215	71.0	72.
Ismailia ... ..	49.8	0	0	0	0	0	1,225.5	0	21.8	36.
Port Said ... ..	10.0	0	50.5	10.1	4.0	0	758.4	.56	267.8	329.
Damietta ... ..	0	0	6.1	1.9	0	0	82.8	0	38.4	55.
Suez... ..	40.0	0	26.7	.9	3.3	0	1,380.0	0	98.3	70.
Frontier Districts ... ..	4.7	0	11.7	1.2	3.1	1.2	455.2	28.7	35.9	22.
Behera ... ..	0	0	31.4	1.4	9.0	.402	486.5	4.1	7.7	9.
Dakahlia ... ..	.285	0	8.5	1.1	1.4	.989	482.1	3.2	6.0	7.
Gharbia... ..	0	0	20.0	.5	3.9	4.8	508.7	1.4	5.3	6.
Menoufia ... ..	0	0	6.4	.3	6.3	0.086	773.0	.257	6.7	5.
Kaliubia ... ..	0	0	1.7	2.0	.577	.437	448.4	.437	9.2	8.
Sharkia ... ..	.472	0	10.5	1.0	1.2	.295	451.8	.074	7.1	6.
Aswan ... ..	0	0	16.8	0	0	0	186.5	0	2.2	3.
Assiut ... ..	0	0	1.2	0.1	0	0	769.3	0	16.9	16.
Beni Suef ... ..	0	0	0	0	5.3	0	187.6	0	1.9	4.
Fayoum ... ..	0	0	0	0	0	0	848.8	0	1.2	1.
Gerga ... ..	0	0	.231	1	.077	0	486.8	1.6	5.2	3.
Gîza ... ..	0	0	1.5	.6	.624	0	1,425.0	.730	21.6	15.
Minia ... ..	0	0	.289	.2	0	0	565.0	.094	4.0	5.
Qena ... ..	0	0	.605	.3	1.8	1.5	506.7	0	3.4	3.
TOTAL ... ..	1.2	.078	8.6	.902	2.2	.887	608.0	1.2	25.2	24

100,000 POPULATION DURING 1946 AND 1947.

Scarlet fever		Cerebro Spinal fever		Diphtheria		Measles		Pulmonary Tuberculosis		Pneumonia		Chicken Pox	
46	47	46	47	46	47	46	47	46	47	46	47	46	47
.196	.095	2.9	3.4	64.7	46.7	106.7	47.6	194.8	153.9	184.3	106.0	25.6	41.4
.631	.646	3.9	1.3	39.0	32.9	4.8	257.4	177.2	139.6	175.5	263.2	28.8	43.8
0	0	0	0	7.8	11.7	1.6	2.9	1.6	11.7	1.6	—	—	—
0	0	2.0	1.1	27.6	20.2	53.8	17.9	135.9	114.3	60.0	98.0	14.8	36.4
0	0	0	0	10.1	11.2	—	1.9	134.2	29.8	34.3	52.2	6.1	3.7
3.3	0	3.3	.924	48.3	13.9	71.7	7.4	146.7	67.1	220.0	59.1	6.7	7.4
0	0	0	0	12.5	1.2	137.2	268.6	11.7	7.2	95.9	20.9	6.2	7.2
0		0	0	4.8	3.4	18.6	27.6	6.6	12.2	8.9	4.8	1.6	2.3
0	.071	.071	.071	6.3	7.0	18.1	17.8	17.7	14.3	2.8	5.9	0.5	1.5
0	0	.044	.129	5.4	2.4	11.6	19.5	15.9	14.2	3.9	4.4	1.2	1.6
.078	.086	0	0	4.4	3.3	82.1	33.7	8.0	9.1	2.5	3.1	1.3	2.7
0	0	.144	.291	10.2	7.3	54.5	18.0	14.9	16.9	7.5	7.6	1.9	5.4
0	0	.079	.221	3.2	2.3	19.3	6.3	10.6	7.7	4.5	2.7	2.8	6.4
0	0	0	0	3.8	7.3	1.9	28.3	24.1	22.7	2.5	5.2	1.9	1.4
0	0	.074	0	2.9	2.4	38.0	8.1	8.9	8.3	8.9	15.0	446	1.0
0	0	0	0	3.9	1.3	12.1	.489	6.4	6.7	.226	.978	2.5	3.7
0	0	0	0	.748	.447	17.5	13.8	11.7	20.4	3.1	6.4	.898	1.9
0	0	0	0	.539	1.0	21.0	9.3	1.5	3.1	4.0	2.9	.846	1.6
0	0	.241	.122	11.9	10.3	128.5	48.7	21.2	17.5	29.4	11.8	3.1	7.9
0	0	0	0	.866	3.0	28.3	33.4	7.3	8.6	2.9	3.2	1.3	.028
0	0	0	0	3.9	1.1	14.9	17.3	4.5	3.5	2.6	1.9	1.1	.994
06	.052	0.48	0.49	11.2	9.49	38.4	35.9	35.3	34.	39.9	30.2	4.8	9.2

TABLE No. 20.—SHOWING INFECTIOUS DISEASES CASE-RATE

Localities	Puerperal Sep.		Dysentery		Influenza		Malaria New		Malaria Relat.	
	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	5.7	5.7	12.9	10.2	302.4	67.7	13.8	20.7	3.3	5.7
Alexandria ... ..	10.4	11.3	24.6	34.7	721.3	140.1	26.3	32.5	0	0
Ismailia ... ..	0	0	0	.293	23.3	128.8	.933	19.0	0	0
Port Said ... ..	3.4	1.1	32.3	20.2	389.0	345.2	38.4	54.4	0	0
Damietta ... ..	2.0	1.9	0	5.6	145.5	91.4	16.2	39.2	0	0
Suez... ..	3.3	.924	95.0	45.3	605.0	165.4	220.	48.0	121.7	24
Frontier Districts ... ..	3.9	0	122.4	74.0	191.7	50.7	265.8	155.2	0	0
Behera ... ..	.497	.724	1.9	.805	27.2	12.5	28.2	214.0	.083	0
Dakahlia ... ..	.642	.212	.642	.706	21.3	10.2	34.6	8.9	1.8	0.
Gharbia ... ..	.710	.386	4.1	3.4	68.2	13.7	95.3	41.6	67.4	.2
Menoufia ... ..	0	.036	2.1	3.1	41.0	10.5	4.9	6.2	0	.2
Kaliubia ... ..	.721	.146	1.2	3.2	65.2	34.3	90.8	103.9	4.6	1.
Sharkia ... ..	15.8	.369	.393	1.4	19.4	7.7	53.7	34.9	.708	.2
Aswan ... ..	.317	.699	12.3	31.1	35.8	12.6	9.2	33.2	313.8	.3
Assiut ... ..	1.3	.797	4.7	5.4	28.3	26.5	.294	.362	14.6	.6
Beni Suef ... ..	1.3	.489	8.6	.978	8.1	6.0	5.3	1.6	.156	.0
Fayoum .. ..	.599	1.3	3.0	.447	.599	2.1	242.8	53.7	266.6	403
Gerga ... ..	.077	0.1	.538	.388	18.6	3.6	1.9	1.6	29.3	0
Giza ... ..	.624	1.3	5.1	5.0	124.5	17.3	13.6	12.2	0	0
Minia ... ..	.578	1.3	6.0	13.2	53.5	8.8	5.0	4.9	0	0
Qena ... ..	.791	.181	2.1	6.5	18.8	13.9	.703	.452	10.9	0
TOTAL ... ..	1.5	1.6	6.2	1.7	96.8	29.8	51.1	35.2	31.3	17.5

100,000 POPULATION DURING 1946 AND 1947 (Contd.)

Anthrax		Whooping Cough		Parotitis		Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas	
46	47	46	47	46	47	46	47	46	47	46	47	46	47	46	47
0	0	4.6	14.9	22.6	34.5	.457	.524	.131	.190	3.7	4.0	0	.333	14.4	14.7
0	.108	12.1	14.9	57.5	25.3	1.4	.108	1.6	.646	9.2	6.4	.253	.754	55.6	59.1
0	0	—	0	0	4.4	0	0	0	0	1.6	4.4	0	1.5	4.7	0
0	0	.673	5.0	13.5	16.3	0	0	2.7	.560	8.7	9.0	0	.560	55.2	37.0
0	0	2.0	39.2	0	22.4	6.1	0	0	0	8.1	3.7	0	0	4.0	16.8
0	0	16.7	7.4	36.7	17.6	0	0	11.7	0	3.3	1.8	0	0	21.7	9.2
0	.597	7.0	76.4	52.2	96.7	0	0	0	0	.779	0	0	0	3.9	0
83	0	9.5	6.0	2.4	26.3	0	0	.248	.322	4.1	2.7	0	0	2.2	4.3
43	0	.285	13.3	1.7	1.6	0	0	.571	1.5	.928	1.8	0	0	5.1	4.9
89	.086	2.7	1.7	1.2	3.4	.044	.043	.089	.343	3.1	1.7	0	.043	5.2	5.8
0	0	12.0	6.6	.939	.941	0	0	3.1	2.2	2.1	2.7	0	0	3.5	5.5
0	.146	2.0	4.7	5.9	6.3	0	0	.333	.582	2.5	1.0	0	0	3.7	4.9
0	.074	1.3	1.8	3.1	.811	0	0	.236	.737	1.1	1.4	0	.074	3.1	3.0
0	0	.633	191.7	7.6	2.1	0	0	1.3	.350	.950	1.7	0	0	.633	.699
0	0	9.6	6.4	.957	1.5	0	0	.221	.797	1.8	2.0	0	0	1.2	2.4
0	0	.156	.326	3.6	11.7	0	0	.156	.489	1.9	1.3	2	0	1.6	.815
0	.296	1.8	.744	8.1	1.5	0	0	.599	.447	1.4	2.1	0	0	2.7	1.6
0	0	5.0	2.8	.970	.210	0	0	1.1	1.5	.676	.388	0	0	.873	.854
2	.122	15.0	26.3	7.7	.365	0	.122	.624	.122	1.6	2.6	0	.609	1.6	4.0
0	0	1.9	6.2	1.5	5.3	0	0	.385	2.2	1.9	3.3	0	0	1.7	1.4
0	0	.088	15.7	.352	.090	0	0	.704	1.5	.715	.362	0	2	.527	.542
03	.047	5.0	11.4	7.1	9.8	0.12	0.06	.68	.845	2.4	2.3	0.01	0.119	6.5	7.6

TABLE No. 21. — SHOWING DEATHS FROM INFECTIOUS DISEASES DURING 1946 AND 1947

Localities	Plague		Typhus		Small Pox		Relapsing fever		Typhoid fever		Scarlet fever		Cerebro Spinal fever	
	46	47	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	0	0	38	11	2	2	301	10	293	211	0	0	17	13
Alexandria ...	34	5	5	7	1	0	226	1	67	106	0	0	16	8
Ismailia ... ..	11	0	1	0	1	0	88	0	7	19	0	0	0	0
Port Said ... ..	3	0	0	0	0	0	13	0	20	38	0	0	0	0
Damietta ... ..	0	0	0	0	0	0	2	0	6	9	0	0	0	0
Suez ... ..	9	0	6	0	0	0	20	0	13	12	0	0	1	1
Frontier Districts	0	0	5	0	0	0	13	2	5	1	0	0	0	0
Behera... ..	0	0	105	12	17	0	139	2	19	22	0	0	0	0
Dakahlia ... ..	0	0	46	3	2	1	106	2	20	21	0	0	0	1
Gharbia ... ..	0	0	55	3	8	11	131	1	32	33	0	0	1	3
Menoufia ... ..	0	0	16	2	3	0	169	0	16	28	0	0	0	0
Kaliubia ... ..	0	0	12	6	1	1	77	1	9	9	0	0	1	2
Sharkia ... ..	0	0	29	4	4	0	129	0	13	21	0	0	1	3
Aswan ... ..	0	0	11	0	0	0	11	0	1	6	0	0	0	0
Assiut ... ..	0	0	5	0	0	0	248	1	29	44	0	0	1	0
Beni-Suef ... ..	0	0	0	1	2	0	48	0	9	8	0	0	0	0
Fayoum ... ..	0	0	0	0	0	0	27	0	3	1	0	0	0	0
Gerga ... ..	0	0	0	0	1	0	132	3	7	16	0	0	0	0
Giza ... ..	0	0	10	2	3	0	255	6	49	48	0	1	3	1
Minia ... ..	0	0	2	0	0	0	144	0	6	11	0	0	0	0
Qena ... ..	0	0	3	1	5	3	135	1	12	18	0	1	0	0
<b>TOTAL ...</b>	<b>57</b>	<b>5</b>	<b>337</b>	<b>52</b>	<b>50</b>	<b>18</b>	<b>2,414</b>	<b>30</b>	<b>637</b>	<b>681</b>	<b>0</b>	<b>2</b>	<b>44</b>	<b>32</b>

TABLE NO. 21.—SHOWING DEATHS FROM INFECTIOUS DISEASES DURING 1946 AND 1947. (*contd.*)

Localities	Diphtheria		Measles		Pulmonary tuberculosis		Chicken pox		Puerperal Septicaemia		Dysentery	
	46	47	46	47	46	47	46	47	46	47	46	46
Cairo ... ..	202	165	1,049	521	1,473	1,494	9	3	44	39	175	110
Alexandria ...	79	70	3	187	881	725	1	2	15	14	58	47
Ismailia ... ..	1	7	2	2	40	32	0	0	1	0	3	3
Port Said ... ..	0	12	0	8	0	95	0	0	0	4	4	9
Damietta ... ..	21	5	0	0	28	22	0	0	0	0	0	0
Suez ... ..	18	10	5	0	50	26	0	0	0	1	2	0
Frontier Districts	4	1	11	54	9	9	0	0	0	0	5	0
Behera... ..	36	26	16	99	122	114	1	1	9	2	8	8
Dakahlia ... ..	56	27	50	41	140	133	0	0	8	2	4	2
Gharbia ... ..	105	43	21	67	182	181	0	0	8	8	11	5
Menoufia ... ..	52	38	31	29	52	54	0	0	2	3	2	
Kaliubia ... ..	51	31	28	9	56	67	0	0	5	0	3	6
Sharkia ... ..	14	22	27	27	115	96	0	0	1	1	5	9
Aswan ... ..	10	16	0	5	38	48	0	0	1	2	2	3
Assiut ... ..	39	22	147	72	94	80	0	0	15	3	20	8
Beni Suef ... ..	14	9	57	2	22	26	0	0	2	3	3	3
Fayoum ... ..	7	3	10	14	53	53	0	0	1	4	1	1
Gerga ... ..	13	12	88	31	10	28	0	0	2	2	3	7
Giza ... ..	79	44	139	46	135	146	0	1	10	7	10	8
Minia ... ..	9	14	18	66	74	79	0	0	6	5	4	2
Qena ... ..	19	9	112	55	62	73	0	0	12	1	1	2
<b>TOTAL ... ..</b>	<b>823</b>	<b>586</b>	<b>1,826</b>	<b>1,335</b>	<b>3,671</b>	<b>3,582</b>	<b>11</b>	<b>7</b>	<b>145</b>	<b>101</b>	<b>329</b>	<b>245</b>

TABLE NO. 21. — SHOWING DEATHS FROM INFECTIOUS DISEASES DURING 1946 AND 1947 (contd.)

Localities	Influenza		Malaria New-Cases		Malaria Relap.		Anthrax		Whooping Cough		Pneumonia	
	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	12	2	2	7	0	0	0	0	14	16	2,306	1,532
Alexandria ...	7	2	5	5	0	0	0	0	5	1	1,094	547
Ismailia ... ..	0	1	2	0	0	0	0	0	0	0	43	93
Port Said ... ..	6	0	1	0	0	0	0	0	1	3	0	55
Damietta ... ..	0	0	0	0	0	0	0	0	0	3	0	4
Suez ... ..	2	1	0	1	0	0	0	0	0	0	47	22
Frontier Districts	2	8	1	1	0	0	0	1	0	1	17	3
Behera... ..	0	2	1	2	0	0	0	0	15	4	35	35
Dakahlia ... ..	3	1	0	1	1	0	1	0	1	4	34	41
Gharbia ... ..	2	1	0	3	0	0	0	0	0	3	136	150
Menoufia ... ..	7	1	0	0	0	0	0	0	2	3	16	34
Kaliubia ... ..	1	2	1	2	0	0	0	0	1	3	29	39
Sharkia ... ..	1	0	2	6	0	0	0	0	0	2	100	64
Aswan ... ..	3	0	0	0	2	1	0	0	0	1	16	11
Assiut ... ..	7	5	0	0	0	0	0	0	5	7	135	83
Beni Suef ... ..	1	3	1	1	0	0	0	0	0	0	51	37
Fayoum ... ..	1	0	3	1	1	0	0	0	0	0	27	22
Gerga ... ..	6	3	1	1	0	0	0	0	3	1	31	26
Giza ... ..	2	4	0	2	0	0	0	0	2	8	209	95
Minia ... ..	3	3	0	0	0	0	0	5	5	6	36	34
Qena ... ..	7	8	3	0	0	0	0	0	0	0	17	32
TOTAL ... ..	67	42	22	33	4	1	1	1	54	63	4,432	3960

TABLE NO. 21.— SHOWING DEATHS FROM INFECTIOUS DISEASES DURING 1946 AND 1947 (contd.)

Localities	Parotitis		Undulant fever		Leprosy		Tetanus		Poliomyelitis		Erysipelas	
	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	4	1	1	0	3	8	33	36	0	7	30	20
Alexandria ...	2	6	0	1	1	0	44	36	2	0	10	13
Ismailia ... ..	0	0	0	0	0	0	2	5	1	1	5	0
Port Said ... ..	0	0	0	0	1	0	7	9	1	0	6	1
Damietta ... ..	0	0	0	0	0	0	3	3	0	0	0	0
Suez ... ..	0	0	0	0	0	0	1	1	0	0	2	0
Frontier Districts	0	0	0	0	0	0	1	0	0	0	1	1
Behera... ..	0	0	0	0	2	4	40	26	0	0	3	3
Dakahlia ... ..	0	1	0	0	5	4	17	22	0	0	5	7
Gharbia ... ..	1	1	1	0	2	5	56	33	0	1	7	11
Menoufia ... ..	1	0	0	0	5	1	22	32	0	0	0	5
Kaliubia ... ..	0	0	0	0	3	2	18	10	0	0	2	5
Sharkia ... ..	0	0	0	0	6	0	9	16	0	0	1	3
Aswan ... ..	0	0	0	0	1	2	1	3	0	0	0	1
Assiut ... ..	1	0	0	0	9	8	20	17	2	0	3	5
Beni Suef ... ..	1	0	0	0	0	1	13	4	0	0	1	1
Fayoum ... ..	0	0	0	0	1	0	9	8	0	0	5	0
Gerga ... ..	0	0	0	0	2	5	7	9	0	0	3	5
Giza ... ..	0	0	0	0	4	1	19	16	0	5	2	7
Minia ... ..	1	0	0	0	4	5	23	15	0	0	1	0
Qena ... ..	2	0	0	0	6	5	9	5	0	0	1	1
<b>TOTAL ...</b>	<b>19</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>55</b>	<b>51</b>	<b>354</b>	<b>306</b>	<b>6</b>	<b>14</b>	<b>88</b>	<b>89</b>

TABLE NO. 22. — SHOWING INFECTIOUS DISEASES DEATH-RATES PER 100,000 POPULATION  
DURING 1946 AND 1947

Localities	Plague		Typhus		Small Pox		Relapsing fever		Typhoid fever		Scarlet fever		Cerebro Spinal fever	
	46	47	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	0	0	2.5	.524	.131	.095	19.6	476	9.1	10.0	0	0	1.1	.619
Alexandria ...	4.3	.539	.631	.754	.126	0	28.5	.108	8.5	1.1	0	0	2.0	.862
Ismailia ... ..	17.1	0	1.6	0	1.6	0	136.9	0	10.9	27.8	0	0	0	0
Port Said ... ..	2.0	0	0	0	0	0	8.7	0	13.5	21.3	0	0	0	0
Damietta ... ..	0	0	0	0	0	0	4.0	0	40.4	16.9	0	0	0	0
Suez ... ..	15.0	0	10.0	0	0	0	33.3	0	21.7	11.1	0	0	1.7	.924
Frontier Districts	0	0	3.9	0	0	0	10.1	1.2	3.9	.597	0	0	0	0
Behera... ..	0	0	8.7	.966	1.4	0	11.5	.161	1.6	1.8	0	0	0	0
Dakahlia ... ..	0	0	3.3	.212	.143	.07	75.7	.141	1.4	1.5	0	0	0	.07
Gharbia ... ..	0	0	2.4	.129	.355	.471	5.8	.043	1.4	1.4				
Menoufia ... ..	0	0	1.3	.171	.235	0	13.2	0	1.3	2.4	0	0	.044	.355
Kaliubia ... ..	0	0	1.7	.878	.144	.146	11.1	.146	1.3	1.3	0	0	0	0
Sharkia ... ..	0	0	2.3	.295	.315	0	10.1	0	1.0	1.5	0	0	.144	.291
Assiut ... ..	0	0	.368	0	0	0	18.3	.072	2.1	3.2	0	0	.079	.221
Aswan ... ..	0	0	3.5	0	0	0	3.5	0	.317	2.1	0	0	0	0
Beni Suef ... ..	0	0	0	.163	.313	0	7.5	0	1.4	1.3	0	0	0	0
Fayoum ... ..	0	0	0	0	0	0	4.0	0	.449	.149	0	0	0	0
Gerga ... ..	0	0	0	0	.077	0	10.1	0.31	.538	1.2	0	0	0	0
Giza ... ..	0	0	1.2	.243	.374	0	31.8	.73	6.1	5.8	0	243	.374	.243
Minia ... ..	0	0	.193	0	0	0	13.9	0	.578	1.0	0	0	0	0
Qena ... ..	0	0	.263	.09	.437	.218	11.9	.09	1.1	1.6	0	.09	0	0
TOTAL ...	.314	.026	1.9	.271	.276	.094	13.3	.156	3.5	3.6	0	.01	.243	.467

TABLE NO. 22.—SHOWING INFECTIOUS DISEASES DEATH-RATES PER 100,000 POPULATION  
DURING 1946 AND 1947 (*contd.*)

Localities	Diphtheria		Measles		Pulmonary Tuberculosis		Acute Pneumonia		Chicken Pox		Puerperal Septicaemia	
	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	13.2	7.8	68.5	24.8	96.1	71.1	150.5	72.9	.587	.143	2.9	1.9
Alexandria ...	10.0	7.5	.379	20.1	102.4	78.1	138.1	166.7	.126	0.216	1.9	1.5
Ismailia ... ..	1.6	10.2	3.1	2.9	62.2	46.8	66.9	136.1	0	0	1.6	0
Port Said ... ..	8.1	6.7	5.4	4.5	0	53.2	0	30.8	0	0	0	2.3
Damietta ... ..	42.4	9.3	0	0	56.6	41.0	6.1	7.5	0	0	0	0
Suez ... ..	30.0	9.2	8.3	0	83.3	24.0	78.3	20.3	0	0	0	0.924
Frontier Districts	3.1	.597	8.6	32.2	7.0	5.4	13.3	1.8	0	0	0	0
Behera... ..	3.0	2.1	1.3	7.9	10.1	9.2	2.9	2.8	.083	.08	.745	.161
Dakahlia ... ..	4.0	1.9	3.6	2.9	10.1	9.4	2.4	2.0	0	0	.571	.141
Gharbia ... ..	4.7	1.8	.931	2.9	9.1	7.8	6.0	6.1	0	0	.355	.343
Menoufia ... ..	4.1	3.3	2.4	2.5	4.1	4.6	1.3	2.9	0	0	.156	.257
Kaliubia ... ..	7.4	4.5	4.0	1.3	8.1	9.8	4.2	5.7	0	0	.721	0
Sharkia ... ..	1.1	1.5	2.1	2.0	6.9	7.1	7.9	4.7	0	0	.079	.074
Assiut ... ..	2.9	1.6	108	5.2	6.9	5.8	2.6	6.0	0	0	1.1	.217
Aswan... ..	3.2	5.6	0	1.7	12.0	16.8	5.1	3.8	0	0	1.317	.699
Beni Suef ... ..	2.2	1.5	8.9	.326	3.4	4.2	8.0	6.0	0	0	.313	.489
Fayoum ... ..	1.0	.447	1.5	2.1	7.9	7.9	4.0	3.3	0	0	.150	.595
Gerga ... ..	1.0	.931	6.8	2.4	.769	2.2	2.4	2.0	0	0	.154	.155
Giza ... ..	9.9	5.4	17.3	5.6	16.8	17.8	26.1	11.6	0	.243	1.2	.852
Minia ... ..	1.3	1.3	2.6	6.2	7.1	7.4	3.5	3.2	0	0	.578	.471
Qena ... ..	1.7	.814	9.8	5.0	5.4	6.6	1.5	2.9	0	0	1.1	.09
<b>TOTAL ...</b>	<b>4.5</b>	<b>3.1</b>	<b>10.1</b>	<b>7.0</b>	<b>20.2</b>	<b>18.7</b>	<b>24.4</b>	<b>20.7</b>	<b>.061</b>	<b>.037</b>	<b>.799</b>	<b>.527</b>

TABLE NO. 22.—SHOWING INFECTIOUS DISEASES DEATH-RATES PER 100,000 POPULATION  
DURING 1946 AND 1947 (*contd.*)

Localities	Dysentery		Influenza		Malaria New		Malaria Relap.		Whooping cough		Pneumonia	
	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	11.4	5.2	.783	.093	.131	.333	0	0	0	0	.914	.762
Alexandria ...	7.3	5.1	.884	.216	.631	.539	0	0	0	0	.631	.108
Ismailia ... ..	4.7	4.4	0	1.5	3.1	0	0	0	0	0	0	0
Port Said ... ..	6.1	3.4	0	.560	0	0	0	0	0	0	.673	1.7
Damietta ... ..	0	0	0	0	0	0	0	0	0	0	0	0
Suez ... ..	3.3	0	3.3	.924	0	.924	0	0	0	0	0	0
Frontier Districts	3.9	0	1.6	4.8	.779	.597	0	0	0	.597	0	.597
Behera... ..	.662	.644	0	.161	.083	.161	0	0	0	0	1.2	.322
Dakahlia ... ..	.285	.141	.214	.07	0	.07	.072	0	.072	0	.072	.282
Gharbia ... ..	.488	.214	.089	.043	0	.129	0	0	0	0	0	.129
Menoufia ... ..	.156	.428	.548	.086	0	0	0	0	0	0	.156	.257
Kaliubia ... ..	.433	.873	.144	.291	.144	.291	0	0	0	0	.144	.437
Sharkia ... ..	.393	.663	.079	0	.157	.442	0	0	0	0	0	.074
Aswan ... ..	1.5	.580	.515	.362	0	0	.624	.35	0	0	.368	.507
Assiut ... ..	.633	1.0	9.5	0.0	0	0	0	0	0	0	0	.350
Bien Suef ... ..	.469	.489	.167	.489	.157	.163	0	0	0	0	0	0
Fayoum ... ..	.150	.149	.150	0	.449	.149	.150	0	0	0	0	0
Gerga ... ..	.231	.543	.461	.31	.077	.078	0	0	0	0	.231	.078
Giza ... ..	1.2	.974	.250	.487	0	.243	0	0	0	0	.250	.974
Minia ... ..	.385	.188	.289	.283	0	0	0	0	0	0	.481	.565
Qena ... ..	.088	.181	.615	.723	.263	0	0	0	0	0	0	0
TOTAL ...	1.8	1.2	.369	.219	.121	.172	.486	.005	.006	.005	.298	.329

TABLE NO. 22.—SHOWING INFECTIOUS DISEASES DEATH-RATES PER 100,000 POPULATION  
DURING 1946 AND 1947 (*contd.*)

Localities	Parotitis		Undulant fever		Leprosy		Tetanus		Poliomyelitis		Erysipelas	
	46	47	46	47	46	47	46	47	46	47	46	47
Cairo ... ..	.262	.048	.065	0	.196	.381	2.2	1.7	0	.333	2.0	.952
Alexandria ...	.253	.646	0	.108	.126	0	5.6	3.9	.253	0	1.3	1.4
Ismailia ... ..	0	0	0	0	0	0	3.1	7.3	1.6	1.5	7.8	0
Port Said ... ..	0	0	0	0	.673	0	4.7	5.0	.673	0	4.0	.560
Damietta ... ..	0	0	0	0	0	0	6.1	5.6	0	0	0	0
Suez ... ..	0	0	0	0	0	0	1.7	.924	0	0	3.3	0
Frontier Districts	0	0	0	0	0	0	.779	0	0	0	.779	.597
Behera... ..	0	0	0	0	.166	.322	3.3	2.1	0	0	.248	.241
Dakahlia ... ..	0	.070	0	0	.357	.282	1.2	1.6	0	0	.357	.491
Gharbia ... ..	.044	.043	.044	0	.214	.214	2.5	1.4	0	.043	.310	.471
Menoufia ... ..	.078	0	0	0	.391	.086	1.7	2.7	0	0	0	.428
Kaliubia ... ..	0	0	0	0	.433	.291	2.6	1.5	0	0	.289	.728
Sharkia ... ..	0	0	0	0	.472	0	.708	1.2	0	0	.079	.221
Aswan ... ..	0	0	0	0	.317	.699	.317	1.0	0	0	0	.350
Assiut ... ..	.074	0	0	0	.662	.58	1.5	1.2	.147	0	.221	.362
Beni Suef ... ..	157	0	0	0	0	.163	2.0	.652	0	0	.151	.163
Fayoum ... ..	0	0	0	0	.449	0	1.3	1.2	0	0	.748	0
Gerga ... ..	0	0	0	0	.154	.388	.538	699	0	0	.231	.388
Giza ... ..	0	0	0	0	.499	.243	2.4	1.9	0	.609	.250	.852
Minia ... ..	963	0	0	0	.385	.471	2.2	1.2	0	0	.963	0
Qena ... ..	.176	0	0	0	.527	.452	.791	.452	0	0	.088	.09
TOTAL ...	.077	.074	.011	.005	.303	.266	2.0	1.6	.33	.073	.485	.464

TABLE NO. 23. — SHOWING QUARTERLY DISTRIBUTION OF RELAPSING FEVER  
CASES AND DEATHS IN EGYPT AND CASE RATE PER 100,000 POPULATION IN 1947.

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100,000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	9	6	2	3	2	1	1	0	14	10	0.667
Alexandria ... ..	2	1	0	0	0	0	0	0	2	1	0.215
Ismailia ... ..	0	0	0	0	0	0	0	0	0	0	0
Port-Said ... ..	0	0	1	0	0	0	0	0	1	0	0.56
Suez... ..	0	0	0	0	0	0	0	0	0	0	0
Damietta ... ..	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL Governorates</b>	<b>11</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>11</b>	<b>0.495</b>
<b>Frontier Districts</b>	<b>46</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>	<b>2</b>	<b>28.7</b>
Behera ... ..	19	0	26	0	6	1	0	1	51	2	4.1
Dakahlia ... ..	22	0	22	2	2	0	0	0	46	2	3.2
Gharbia ... ..	26	0	5	1	1	0	0	0	32	1	1.4
Menoufia ... ..	3	0	0	0	0	0	0	0	3	0	0.257
Kaliubia ... ..	0	0	3	1	0	0	0	0	3	1	0.437
Sharkia ... ..	0	0	0	0	1	0	0	0	1	0	0.074
<b>TOTAL Lower Egypt</b>	<b>70</b>	<b>0</b>	<b>56</b>	<b>4</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>136</b>	<b>6</b>	<b>1.7</b>
Aswan ... ..	0	0	0	0	0	0	0	0	0	0	0
Assiut ... ..	0	1	0	0	0	0	0	0	0	1	0
Beni Suef ... ..	0	0	0	0	0	0	0	0	0	0	0
Fayoum ... ..	0	0	0	0	0	0	0	0	0	0	0
Gerga ... ..	0	0	17	3	4	0	0	0	21	3	1.6
Giza... ..	5	3	1	2	0	0	0	1	6	6	0.73
Minia ... ..	0	0	1	0	0	0	0	0	1	0	0.094
Qena ... ..	0	1	0	0	0	0	0	0	0	1	0
<b>TOTAL Upper Egypt</b>	<b>5</b>	<b>5</b>	<b>19</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>28</b>	<b>11</b>	<b>0.387</b>
<b>GRAND TOTAL...</b>	<b>132</b>	<b>14</b>	<b>80</b>	<b>21</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>229</b>	<b>30</b>	<b>—</b>

**TABLE NO. 24.—SHOWING QUARTERLY DISTRIBUTION OF TYPHUS CASES AND DEATHS  
AND CASE RATE PER 100,000 OF POPULATION DURING 1947.**

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate Per 100000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	14	3	16	3	15	4	4	1	49	11	2·3
Alexandria ... ..	5	1	0	0	5	3	5	3	15	7	1·6
Ismailia ... ..	0	0	0	0	0	0	0	0	0	0	0·0
Port Said ... ..	6	0	5	0	5	0	2	0	18	0	10·1
Suez... ..	0	0	0	0	0	0	1	0	1	0	0·9
Damietta ... ..	0	0	0	0	1	0	0	0	1	0	1·9
<b>TOTAL Governorates</b>	<b>25</b>	<b>4</b>	<b>21</b>	<b>3</b>	<b>26</b>	<b>7</b>	<b>12</b>	<b>4</b>	<b>84</b>	<b>18</b>	<b>2·4</b>
Frontier Districts	1	0	1	0	0	0	0	0	2	0	1·2
Behera ... ..	1	1	6	3	4	7	7	1	18	12	1·4
Dakahlia ... ..	3	1	3	0	1	0	8	2	15	3	1·1
Gharbia ... ..	2	0	5	0	3	3	2	0	12	3	0·5
Menoufia ... ..	1	2	1	0	1	0	0	0	3	2	0·3
Kaliubia ... ..	2	0	8	3	1	0	3	3	14	6	2·0
Sharkia ... ..	1	1	9	1	2	0	2	1	14	4	1·0
<b>TOTAL Lower Egypt</b>	<b>10</b>	<b>5</b>	<b>32</b>	<b>7</b>	<b>12</b>	<b>10</b>	<b>22</b>	<b>8</b>	<b>76</b>	<b>30</b>	<b>0·9</b>
Aswan ... ..	0	0	0	0	0	0	0	0	0	0	0
Assiut ... ..	1	0	0	0	0	0	0	0	1	0	0·1
Beni Suef ... ..	0	1	0	0	0	0	0	0	0	1	0
Fayoum ... ..	0	0	0	0	0	0	0	0	0	0	0
Giza ... ..	2	0	1	0	2	2	0	0	5	2	0·6
Gerga ... ..	0	0	1	0	0	0	0	0	1	0	0·1
Minia ... ..	0	0	1	0	0	0	1	0	2	0	2·2
Qena ... ..	0	1	0	0	1	0	2	0	3	1	0·3
<b>TOTAL Upper Egypt</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>12</b>	<b>4</b>	<b>0·2</b>

TABLE NO. 25.—SHOWING QUARTERLY DISTRIBUTION OF SMALL POX CASES AND DEATHS IN EGYPT  
AND CASE RATE PER 100,000 OF POPULATION 1947

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	6	2	3	0	0	0	1	0	10	2	0.476
Alexandria ... ..	0	0	0	0	1	0	0	0	1	0	0.108
Ismailia ... ..	0	0	0	0	0	0	0	0	0	0	0
Port Said ... ..	0	0	0	0	0	0	0	0	0	0	0
Suez ... ..	0	0	0	0	0	0	0	0	0	0	0
Damietta ... ..	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL Governorates</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>2</b>	<b>0.32</b>
<b>Frontier Districts</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1.2</b>
Behera ... ..	0	0	4	0	1	0	0		5	0	0.402
Dakahlia ... ..	0	0	14	1	0	0	0	0	14	1	0.989
Gharbia ... ..	19	2	33	4	61	5	0	0	113	11	4.8
Menoufia ... ..	1	0	0	0	0	0	0	0	1	0	0.086
Kaliubia ... ..	0	0	2	0	1	0	0	1	3	1	0.437
Sharkia ... ..	2	0	2	0	0	0	0	0	4	0	0.925
<b>TOTAL Lower Egypt</b>	<b>22</b>	<b>2</b>	<b>55</b>	<b>5</b>	<b>63</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>140</b>	<b>13</b>	<b>1.7</b>
Aswan ... ..	0	0	0	0	0	0	0	0		0	0
Assiut ... ..	0	0	0	0	0	0	0	0	0	0	0
Beni Suef ... ..	0	0	0	0	0	0	0	0	0	0	0
Fayoum ... ..	0	0	0	0	0	0	0	0	0	0	0
Gerga ... ..	0	0	0	0	0	0	0	0	0	0	0
Giza ... ..	0	0	0	0	0	0	0	0	0	0	0
Minia ... ..	0	0	0	0	0	0	0	0	0	0	0
Qena ... ..	15	3	2	0	0	0	0	0	17	3	1.5
<b>TOTAL Upper Egypt</b>	<b>15</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>3</b>	<b>0.235</b>

**TABLE NO. 26.—SHOWING QUARTERLY DISTRIBUTION OF TYPHOID FEVER CASES AND DEATHS  
AND CASE-RATE PER 100,000 OF POPULATION, 1947.**

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	273	16	597	45	937	119	243	31	2,050	211	97·6
Alexandria ... ..	67	11	158	19	306	58	138	18	669	106	72·1
Ismailia ... ..	3	2	9	5	10	3	3	9	25	19	36·6
Port Said ... ..	32	5	198	12	301	14	57	7	588	38	329·6
Suez ... ..	10	0	18	1	41	10	7	1	76	12	70·6
Damietta ... ..	6	0	8	2	13	5	3	2	30	9	55·2
<b>TOTAL Governorates</b>	<b>391</b>	<b>34</b>	<b>988</b>	<b>84</b>	<b>1,608</b>	<b>209</b>	<b>451</b>	<b>68</b>	<b>3,438</b>	<b>395</b>	<b>100·0</b>
Frontier Districts ...	<b>5</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>37</b>	<b>1</b>	<b>22·1</b>
Behera ... ..	22	3	22	5	50	10	21	4	122	22	9·8
Dakahlia ... ..	11	4	29	6	52	7	7	4	99	21	8·8
Gharbia... ..	35	9	39	7	72	12	12	5	158	33	6·8
Menoufia ... ..	14	4	17	4	24	10	10	10	65	28	5·6
Kaliubia ... ..	14	2	17	1	26	4	4	2	61	9	8·9
Sharkia ... ..	15	8	34	1	32	6	6	6	87	21	6·4
<b>TOTAL Lower Egypt</b>	<b>111</b>	<b>30</b>	<b>165</b>	<b>24</b>	<b>256</b>	<b>49</b>	<b>60</b>	<b>31</b>	<b>592</b>	<b>143</b>	<b>7·2</b>
Aswan ... ..	0	1	5	2	5	2	0	1	10	6	3·5
Assiut ... ..	53	6	86	17	64	16	30	5	233	44	16·9
Beni Suef ... ..	0	1	6	0	13	4	7	3	26	8	4·2
Fayoum ... ..	0	1	2	0	3	0	2	0	7	1	1·0
Gerga ... ..	5	2	9	2	17	6	10	6	41	16	3·2
Giza ... ..	27	15	35	10	54	15	8	8	124	48	15·1
Minia ... ..	12	3	13	1	19	4	12	3	56	11	5·3
Qena ... ..	12	6	9	6	11	4	5	2	37	18	3·3
<b>TOTAL Upper Egypt</b>	<b>109</b>	<b>35</b>	<b>165</b>	<b>38</b>	<b>186</b>	<b>51</b>	<b>74</b>	<b>28</b>	<b>534</b>	<b>152</b>	<b>7·4</b>

TABLE NO. 27.— SHOWING QUARTERLY DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS  
AND CASE-RATE PER 100,000 OF POPULATION, 1947

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	244	25	252	50	244	46	240	44	980	165	46·7
Alexandria ... ..	85	21	59	15	72	19	90	15	306	70	32·9
Ismailia ... ..	0	0	0	0	1	1	7	6	8	7	11·7
Port Said ... ..	9	1	5	3	14	5	8	3	36	12	20·2
Suez ... ..	4	0	4	4	1	2	6	4	15	10	13·9
Damietta ... ..	1	1	2	1	2	2	1	1	6	5	11·2
<b>TOTAL Governorates</b>	<b>343</b>	<b>48</b>	<b>322</b>	<b>73</b>	<b>334</b>	<b>75</b>	<b>352</b>	<b>73</b>	<b>1,351</b>	<b>269</b>	<b>39·3</b>
Frontier Districts	0	0	1	1	1	0	0	0	2	1	1·2
Behera ... ..	9	8	8	4	17	6	8	8	42	26	3·4
Dakahlia ... ..	5	4	7	4	22	14	9	5	43	27	7·0
Gharbia ... ..	10	11	18	10	19	10	8	12	55	43	2·4
Menoufia ... ..	8	3	10	4	12	20	9	11	39	38	3·3
Kaliubia ... ..	11	7	8	5	18	13	13	6	50	31	7·3
Sharkia ... ..	2	2	9	4	11	10	9	6	31	22	2·3
<b>TOTAL Lower Egypt</b>	<b>45</b>	<b>35</b>	<b>60</b>	<b>31</b>	<b>99</b>	<b>73</b>	<b>56</b>	<b>48</b>	<b>260</b>	<b>188</b>	<b>3·2</b>
Aswan ... ..	6	4	6	4	5	4	4	4	21	16	7·39
Assiut ... ..	5	2	6	6	9	6	13	8	33	22	2·4
Beni Suef ... ..	0	1	4	2	4	5	0	1	8	9	1·3
Fayoum ... ..	3	1	0	1	0	0	0	1	3	3	0·447
Gerga ... ..	3	3	6	6	1	1	3	2	13	12	1·0
Giza ... ..	11	4	12	8	32	18	30	14	85	44	10·3
Minia ... ..	7	2	2	2	12	2	11	8	32	14	3·0
Qena ... ..	1	0	5	2	4	5	2	2	12	9	1·1
<b>TOTAL Upper Egypt</b>	<b>36</b>	<b>17</b>	<b>41</b>	<b>31</b>	<b>67</b>	<b>41</b>	<b>63</b>	<b>40</b>	<b>207</b>	<b>129</b>	<b>2·9</b>

TABLE No. 28.— SHOWING QUARTERLY DISTRIBUTION OF CEREBRO SPINAL FEVER  
CASES AND DEATHS IN EGYPT AND CASE-RATE PER 100,000 POPULATION, 1947

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	20	5	27	7	10	1	15	0	72	13	3.4
Alexandria ... ..	1	0	2	3	2	2	7	3	12	8	1.3
Ismailia ... ..	0	0	0	0	0	0	0	0	0	0	0
Port Said ... ..	2	0	0	0	0	0	0	0	2	0	1.1
Suez... ..	0	0	1	1	0	0	0	0	1	1	0.924
Damietta ... ..	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL Governorates</b>	<b>23</b>	<b>5</b>	<b>30</b>	<b>11</b>	<b>12</b>	<b>3</b>	<b>22</b>	<b>3</b>	<b>87</b>	<b>22</b>	<b>2.5</b>
Frontier Districts ...	0	0	0	0	0	0	0	0	0	0	0
Behera ... ..	0	0	0	0	0	0	0	0	0	0	0
Dakahlia ... ..	1	0	0	1	0	0	0	0	1	1	0.071
Gharbia ... ..	2	1	0	0	1	1	0	1	3	3	0.129
Menoufia ... ..	0	0	0	0	0	0	0	0	0	0	0
Kaliubia ... ..	1	1	0	0	0	0	1	1	2	2	0.291
Sharkia ... ..	1	1	1	1	1	1	0	0	3	3	0.221
<b>TOTAL Lower Egypt</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>9</b>	<b>9</b>	<b>0.110</b>
Aswan ... ..	0	0	0	0	0	0	0	0	0	0	0
As-iut .. ...	0	0	0	0	0	0	0	0	0	0	0
Beni Suef ... ..	0	0	0	0	0	0	0	0	0	0	0
Fayoum ... ..	0	0	0	0	0	0	0	0	0	0	0
Gerga ... ..	0	0	0	0	0	0	0	0	0	0	0
Giza... ..	0	0	0	0	0	0	1	1	1	1	0.122
Minia ... ..	0	0	0	0	0	0	0	0	0	0	0
Qena ... ..	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL Upper Egypt</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0.014</b>

**TABLE NO. 29.— SHOWING QUARTERLY DISTRIBUTION OF WHOOPING COUGH CASES AND DEATHS  
IN EGYPT AND CASE-RATE PER 100,000 OF POPULATION, 1947**

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	91	2	159	8	50	4	14	2	314	16	14·9
Alexandria ...	43	1	47	0	45	0	3	0	138	1	14·9
Ismailia ... ..	0	0	0	0	0	0	0	0	0	0	0
Port-Said ... ..	1	0	6	2	2	1	0	0	9	2	5·0
Damietta ... ..	0	0	12	0	8	0	1	0	21	0	39·2
Suez... ..	5	0	3	0	0	0	0	0	8	0	7·4
<b>TOTAL Governorates</b>	<b>140</b>	<b>3</b>	<b>227</b>	<b>10</b>	<b>105</b>	<b>5</b>	<b>18</b>	<b>2</b>	<b>490</b>	<b>20</b>	<b>14·3</b>
<b>Frontier Districts ...</b>	<b>13</b>	<b>0</b>	<b>82</b>	<b>1</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>128</b>	<b>1</b>	<b>76·4</b>
Behera ... ..	35	2	22	2	17	0	0	0	74	4	5·9
Dakahlia ... ..	9	0	125	4	32	0	22	0	188	4	13·3
Gharbia ... ..	16	0	14	3	6	0	4	0	40	3	1·7
Menoufia ... ..	28	0	12	0	32	3	5	0	77	3	6·6
Kaliubia ... ..	5	1	13	0	6	0	8	2	32	3	4·7
Sharkia... ..	10	0	9	0	5	1	1	1	25	2	1·8
<b>TOTAL Lower Egypt</b>	<b>103</b>	<b>3</b>	<b>195</b>	<b>9</b>	<b>98</b>	<b>4</b>	<b>40</b>	<b>3</b>	<b>436</b>	<b>19</b>	<b>5·3</b>
Aswan ... ..	514	1	34	0	0	0	0	0	548	1	191·6
Assiut ... ..	57	2	19	4	7	0	5	1	88	7	6·4
Beni Suef ... ..	0	0	2	0	0	0	0	0	2	0	0·326
Fayoum ... ..	0	0	5	0	0	0	0	0	5	0	0·744
Gerga ... ..	32	0	0	0	0	0	0	0	36	1	2·8
Giza ... ..	154	7	47	1	14	0	1	0	216	8	26·3
Minia ... ..	9	0	45	2	11	4	1	0	66	2	6·2
Qena ... ..	171	0	3	0	0	0	0	0	174	0	15·7
<b>TOTAL Upper Egypt</b>	<b>939</b>	<b>11</b>	<b>159</b>	<b>7</b>	<b>32</b>	<b>4</b>	<b>7</b>	<b>1</b>	<b>1·135</b>	<b>23</b>	<b>15·7</b>

**TABLE No. 30.— SHOWING QUARTERLY DISTRIBUTION OF MEASLES CASES AND DEATHS IN EGYPT  
AND CASE-RATE PER 100,000 OF POPULATION 1947.**

Localities	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Total		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	169	57	542	257	284	202	5	1	1,000	517	47·6
Alexandria ... ..	957	50	1,312	120	115	17	5	0	2,389	187	257·4
Ismailia ... ..	1	1	1	0	0	1	0	0	2	2	2·9
Port Said ... ..	1	0	17	3	14	4	0	1	32	8	17·9
Suez... ..	3	0	3	0	2	0	0	0	8	0	7·4
Damietta ... ..	0	0	0	0	1	0	0	0	1	0	1·9
<b>TOTAL Governorates</b>	<b>1,131</b>	<b>108</b>	<b>1,875</b>	<b>380</b>	<b>416</b>	<b>224</b>	<b>10</b>	<b>2</b>	<b>3,432</b>	<b>714</b>	<b>99·8</b>
Frontier Districts ...	<b>335</b>	<b>35</b>	<b>112</b>	<b>19</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>450</b>	<b>54</b>	<b>268·6</b>
Behera ... ..	134	35	185	49	21	13	3	2	343	9	27·6
Dakahlia ... ..	80	7	74	20	60	3	38	11	252	41	17·8
Gharbia ... ..	229	39	147	20	72	7	7	1	455	67	19·5
Menoufia ... ..	212	15	105	8	72	4	5	2	394	29	33·7
Kaliubia ... ..	44	3	67	3	8	1	5	2	124	9	18·0
Sharkia ... ..	4	0	45	22	37	5	0	0	86	27	6·3
<b>TOTAL Lower Egypt</b>	<b>703</b>	<b>99</b>	<b>623</b>	<b>122</b>	<b>270</b>	<b>33</b>	<b>58</b>	<b>18</b>	<b>1,654</b>	<b>272</b>	<b>20·2</b>
Aswan ... ..	21	1	12	3	48	1	0	0	81	5	29·7
Assiut ... ..	16	10	54	38	25	23	17	1	112	72	8·1
Beni Suef ... ..	1	2	2	0	0	0	0	0	3	2	0·489
Fayoum ... ..	19	0	56	2	4	0	14	12	93	14	13·8
Gerga ... ..	100	19	17	5	3	3	0	4	120	31	9·3
Giza... ..	139	22	218	16	26	8	17	0	400	46	48·7
Minia ... ..	47	17	163	25	130	19	14	5	354	66	33·4
Qena ... ..	86	13	85	31	10	10	10	1	191	55	17·3
<b>TOTAL Upper Egypt</b>	<b>429</b>	<b>84</b>	<b>607</b>	<b>120</b>	<b>246</b>	<b>64</b>	<b>76</b>	<b>28</b>	<b>1,354</b>	<b>296</b>	<b>18·8</b>

TABLE NO. 31.—SHOWING QUARTERLY DISTRIBUTION OF ACUTE POLIOMYELITIS  
CASES AND DEATHS IN EGYPT AND CASE-RATE PER 100,000 POPULATION 1947.

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		Total		Case rate per 100,000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo ... ..	0	0	0	0	2	2	5	5	7	7	0·333
Alexandria ... ..	4	0	1	0	1	0	1	0	7	0	0·754
Ismailia ... ..	0	0	0	0	0	0	1	1	1	1	1·5
Port Said ... ..	1	0	0	0	0	0	0	0	1	0	0·56
Suez... ..	0	0	0	0	0	0	0	0	0	0	0
Damietta ... ..	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL Governorates</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>16</b>	<b>8</b>	<b>0·465</b>
<b>Frontier Districts</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Behera ... ..	0	0	0	0	0	0	0	0	0	0	0
Dakahlia ... ..	0	0	0	0	0	0	0	0	0	0	0
Gharbia ... ..	0	0	1	1	0	0	0	0	1	1	0·043
Menoufia ... ..	0	0	0	0	0	0	0	0	0	0	0
Kaliubia ... ..	0	0	0	0	0	0	0	0	0	0	0
Sharkia ... ..	0	0	0	0	0	0	1	0	1	0	0·074
<b>TOTAL Lower Egypt</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0·024</b>
Aswan ... ..	0	0	0	0	0	0	0	0	0	0	0
Assiut ... ..	0	0	0	0	0	0	0	0	0	0	0
Beni Suef ... ..	0	0	0	0	0	0	0	0	0	0	0
Fayoum ... ..	0	0	0	0	0	0	0	0	0	0	0
Gerga ... ..	0	0	0	0	0	0	0	0	0	0	0
Giza ... ..	0	0	0	3	1	1	1	1	5	5	0·609
Minia ... ..	0	0	0	0	0	0	0	0	0	0	0
Qena ... ..	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL Upper Egypt</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>0·609</b>

TABLE NO. 32.— SHOWING DISTRIBUTION OF INFECTIOUS DISEASES  
CASES ACCORDING TO URBAN AND RURAL, 1947.

Localities	Typhus		Small Pox		Relapsing Fever		Typhoid Fever		Diphtheria		Measles	
	Urban	Rural	U	R	U	R	U	R	U	R	U	R
Cairo ... ..	49	0	10	0	14	0	2050	0	980	0	1,000	0
Alexandria ... ..	15	0	1	0	2	0	669	0	306	0	2,389	0
Canal ... ..	18	0	0	0	1	0	602	11	38	6	33	1
Damietta ... ..	1	0	0	0	0	0	30	0	1	5	1	0
Suez... ..	1	0	0	0	0	0	76	0	15	0	8	0
<b>TOTAL ... ..</b>	<b>84</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>3427</b>	<b>11</b>	<b>1340</b>	<b>11</b>	<b>3431</b>	<b>1</b>
Frontier Districts ... ..	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>48</b>	<b>0</b>	<b>37</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>450</b>	<b>0</b>
Behera ... ..	3	15	1	4	3	48	31	91	16	26	115	228
Dakahlia ... ..	0	15	1	13	2	44	15	84	17	26	14	238
Gharbia ... ..	4	8	9	104	6	26	86	72	26	30	82	373
Menoufia ... ..	0	3	1	0	1	2	12	53	10	29	65	329
Kaliubia ... ..	2	12	0	3	0	3	9	72	13	37	28	96
Sharkia ... ..	0	14	1	3	0	1	44	43	10	21	42	44
<b>TOTAL ... ..</b>	<b>9</b>	<b>67</b>	<b>13</b>	<b>127</b>	<b>12</b>	<b>124</b>	<b>197</b>	<b>395</b>	<b>91</b>	<b>169</b>	<b>346</b>	<b>1308</b>
Aswan ... ..	0	0	0	0	0	0	4	6	14	87	50	31
Assiut ... ..	0	1	0	0	0	0	83	150	17	16	53	59
Beni Suef ... ..	0	0	0	0	0	0	16	10	4	4	2	1
Fayoum ... ..	0	0	0	0	0	0	2	5	0	3	0	93
Gerga ... ..	0	1	0	0	0	21	11	30	6	7	34	86
Giza... ..	1	4	0	0	1	5	51	73	39	46	20	380
Minia ... ..	0	2	0	0	0	1	23	33	19	3	91	263
Qena ... ..	0	3	2	15	0	0	10	27	93	9	95	96
<b>TOTAL ... ..</b>	<b>1</b>	<b>11</b>	<b>2</b>	<b>15</b>	<b>1</b>	<b>27</b>	<b>200</b>	<b>334</b>	<b>102</b>	<b>105</b>	<b>345</b>	<b>1009</b>
<b>GRAND TOTAL ... ..</b>	<b>96</b>	<b>78</b>	<b>28</b>	<b>142</b>	<b>78</b>	<b>152</b>	<b>3861</b>	<b>740</b>	<b>1535</b>	<b>274</b>	<b>4572</b>	<b>2222</b>

TABLE No. 33.—SHOWING NUMBER OF PERSONS IMMUNISED AGAINST PLAGUE, TYPHOID, TYPHUS, SMALL-POX, CHOLERA AND DIPHTHERIA 1947

Localities			Plague		Typhoid		Typhus			Small—pox		Cholera		Diphtheria		
			Single Inject.	Two Inject.	Single Inject.	Two Inject.	Single Inject.	Two Inject.	Three Inject.	Primary Immun.	Prophylactic Vaccination	Single Inject.	Two Inject.	Single Inject.	Two Inject.	Three Inject.
Cairo	...	...	626	407	25,536	166,420	3,373	602	331	85,483	645,764	807	1,833	62,605	63,903	62,756
Alexandria	...	...	6,027	2,135	128,054	83,560	1,090	445	—	32,809	248,605	902,203	—	25,482	22,149	20,887
Canal	...	...	—	498	—	8,726	300	—	416	13,463	68,322	249,592	—	578	701	4,958
Damietta	...	...	—	—	980	980	—	—	—	3,952	59,585	161,569	5,150	2,230	2,142	2,340
Suez...	...	...	—	—	66	847	—	—	34	5,391	49,968	97,418	176	662	757	2,598
Frontier Districts	...	...	46	35	967	1,518	36	36	36	5,738	51,672	94,019	48,566	104	719	26
Behera	...	...	43	43	969	2,507	20	20	20	40,359	245,704	126,723	1,489	3,514	3,701	3,226
Dakahlia	...	...	—	210	574	1,611	43	29	52	34,661	121,879	1,010,634	51,072	1,219	1,116	5,118
Gharbia	...	...	—	—	173	3,425	180	193	—	88,913	801,150	748,904	522,628	2,834	2,506	1,306
Menoufia...	...	...	42	42	285	3,062	—	—	27	35,732	330,047	786,289	366,471	4,212	3,481	4,619
Kaliubia	...	...	—	—	302	1,457	—	—	—	27,186	3,552	593,791	98,840	413	417	3,388
Sharkia	...	...	—	413	190	1,537	—	—	—	46,132	212,268	1,001,110	83,545	261	190	448
Aswan	...	...	2	2	92	272	—	—	—	9,508	79,483	238,474	—	3,079	2,092	2,831
Assiut	...	...	—	133	1,797	2,205	—	—	—	46,987	309,123	221,342	96,750	5,600	5,008	6,931
Beni Suef	...	...	2	2	117	430	—	—	—	18,720	125,191	303	569	2,686	2,339	2,137
Fayoum	...	...	168	168	84	402	—	—	—	28,052	170,995	529,210	84,557	4,430	4,388	543
Gerga	...	...	—	173	—	957	128	—	—	32,028	449,249	1,097,584	336	165	157	295
Giza	...	...	—	—	716	2,080	—	—	—	34,339	813,897	615,199	615,199	1,546	1,510	15,42
Minia	...	...	—	—	129	840	—	—	—	22,980	113,090	657,953	34,104	1,831	1,320	161
Qena	...	...	41	31	701	1,584	50	128	—	37,675	170,770	1,044,324	70,799	295	160	410

## Chapter III — INDUSTRIAL HYGIENE

### (1) *Applications for New Permits :*

The number of applications for new permits for unhealthy establishments of the first Class received during the year 1947 was 1,750.

### (2) *Permits issued by the Ministry :*

A total of 861 permits were issued by the Ministry during the year under review.

### (3) *Ministerial Arrêtés :*

A Ministerial arrêté was issued in May modifying the schedule of the dangerous, inconvenient and unhealthy establishments as follows :

I.—Adding the following establishments to Schedule A of Class II establishments :

(a) Establishments for pumping and patching inner tyres of cars, motor cycles and pedal cycles.

(b) Motor car servicing and small repair workshops where no mechanical or electrical motors, fires or hammering are employed.

II.—Substitution of the title “Garages used as industrial establishments or annexed to car hiring establishments” on Schedule A of Class II establishments by the following title, “Garages used as industrial establishments or annexed to car hiring establishments and Garages of large buildings or blocks of flats provided more than three cars are kept.”

III.—Substitution of the title “Commercial Coal and oil cake depots” on Schedule “A” of class II establishments by the following title, “Commercial depots for coal, oil cake, hull of rice and other seeds and other similar inflammable material.”

IV.—Substitution of the title, “Shoemaking establishments employing from three to ten workmen” on Schedule “B” of class III establishments by the following title, “Leather manufacture Establishments, *e.g.* shoes, bags, etc. employing from three to ten workmen.”

## Chapter IV — FOOD CONTROL

### Statistics Showing Work done by Food Control Gangs In Custom Houses during 1947

TABLE No. 34.—CONSIGNMENTS EXAMINED AND RESULTS OF SAMPLES TAKEN THEREFROM

No. of Consignments examined	No. of Samples taken	Results of Analysis		
		Genuine	Unfit	Adulterated
14,622	863	670	137	56

TABLE No. 35.—SHOWING QUANTITIES OF FOODSTUFFS CONDEMNED OR REFUSED ENTRY  
INTO THE COUNTRY.

Kinds of Food	Kilogrammes	Cans or Bottles	Boxes Sacks or Drums.
(a) <i>Fresh Foods :</i>			
Fruits ... ..	45,997	—	461
Vegetables ... ..	4,890	—	92,301
Meat ... ..	847	—	—
Fish ... ..	75	—	—
(b) <i>Canned Foods :</i>			
Jams and dried fruits ... ..	88,567	9,213	93
Milk and its products ... ..	786	5,519	—
Meat ... ..	739	915	—
Fish ... ..	3,121	14,352	1,805
Vegetables and Sauce ... ..	959	2,499	6
(c) <i>Oils ... ..</i>	5,538	—	1
(d) <i>Butter and Mashi ... ..</i>	250	117	47
(e) <i>Fat and Margarine ... ..</i>	37	29	—
(f) <i>Cheese ... ..</i>	80	22	—
(g) <i>Other Foods</i>			
Flour and Semolina ... ..	148,903	—	2,866
Flour products ... ..	18,363	675	—
Honey ... ..	7,849	—	—

FOODSTUFFS CONDEMNED OR REFUSED ENTRY INTO THE COUNTRY (*contd.*)

Kinds of Food	Kilogrammes	Cans or Bottles	Boxes Sacks or Drums
Sugar ... ..	142	—	3
Sweets and chocolate... ..	425	2	477
Tea ... ..	153,214	—	551
Coffee ... ..	5,130	—	971
Nuts and Almonds ... ..	38,776	—	2,214
Spices ... ..	459	5,195	—
Alcoholic drinks ... ..	34,630	3,561	—
Non-Alcoholic Drinks ... ..	897	1,423	—
Aerated Waters ... ..	—	—	3
Seeds and Corns ... ..	767,317	—	735
Tamarind ... ..	5,236	—	90
Chewing gum ... ..	71,344	—	588
Other foods ... ..	15,167	83	611
<b>TOTAL ... ..</b>	<b>1,438,621</b>	<b>43,605</b>	<b>103,323</b>

TABLE No. 36.—SHOWING QUANTITIES OF FOODSTUFFS CONDEMNED AND NUMBERS OF SAMPLES TAKEN AND THE RESULTS OF THEIR ANALYSIS DURING 1947

Name of Article	Foodstuffs Condemned						Samples taken				Percentage	
	Units	Bottles	Cans	Lbs.	Okes	No. of Samples	Genuine	Adulterated	Unfit	Adulteration	Unfitness	
A.—FRESH FOODS												
Fruits and Vegetables	49,381	302	1,546	61,449	198,234	74	71	3	—	4.1	—	
Fish	16,630	—	275	23,656	83,700	57	56	1	—	1.8	—	
Meat	3,080	—	106	1,189	1,064	—	—	—	—	—	—	
Other Fresh Foods	3,869	—	—	—	2,531	9	9	—	—	—	—	
B.—COOKED FOODS	50,042	—	67	4,955	6,740	15	15	—	—	—	—	
C.—CANNED FOODS:												
Jams	—	—	238	38	138	1	11	—	1	—	8.3	
Milk and its products	—	—	170	—	—	1	1	—	—	—	—	
Fruits and Vegetables	170	17	1,105	332	3,491	3	1	—	2	—	66.6	
Meat	26	—	2	48	15	2	2	—	—	—	—	
Fish	714	—	2,037	1,872	581	8	6	—	2	—	25	
Other Canned Foods	100	467	23	259	177	23	20	7	1	25.7	3.8	
D.—OILS:												
Olive oil	—	—	—	3	27	76	64	1	11	1.3	14.5	
Sesame oil	—	—	—	20	4	46	424	6	6	1.4	1.4	
Linseed oil	—	—	—	47	8	176	139	16	21	9	11.9	
Lettuce oil	—	—	—	1	2	4	4	—	—	—	—	
Safflower oil	—	—	—	—	—	49	45	3	1	6	2	
Cotton seed oil	—	—	—	—	—	230	223	3	4	1.3	1.8	
Other oils	—	113	—	75	433	5	42	3	10	5.4	18.1	

## E.—DIFFERENT FOODS :

[illegible]

TABLE No. 37.—SHOWING VARIOUS STATISTICS 1947

P.V. drawn up according to Art. II of law No. (48) of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Bandars to which itinerant vendor regulations were applied	Bandars to which milk Vendors regulations were applied	No. of itinerant vendors licensed during 1947	No. of milk vendors licensed during 1947
12,400	13,515	5,498	2	1	1,386	343

TABLE No. 38. — SHOWING NUMBER OF MILK SAMPLES TAKEN AND THE RESULTS OF THEIR ANALYSIS

No. of samples	Result of Analysis			
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Aadulterated by both
10,913	9,905	559	393	56

## Chapter V — RURAL HEALTH

The Rural Health Department was established in 1942 and annexed to the Under Secretary of State for Village Affairs. Rural health Services were under the control of Provincial Councils which met their expenditures from credits allocated by this Ministry

In 1945, this administration was attached to the Preventive Medicine Department. Credits provided by this Ministry were then allocated for the construction of new health Centres. The number of centres in operation at the end of 1945 was 85 with 12 only provided with in-patient accommodation. By the end of 1946, there were 103 health centres in service with 27 of them provided with in-patient accommodation, *i.e.* 15 health centres more than the previous year.

By the end of 1947, the number of health centres in existence was 137. 118 of them were in full operation. Three of these were attached to the Hospitals Section. The remaining 19 health centres have been equipped, provided with personnel and began outpatient treatment. These will be in full operation during 1948. 71 health centres are now provided with in-patient accommodation or 44 more health centres than the previous year. 29 further health centres have been constructed during the year under review and will be taken over and equipped during 1948.

This shows the great number of health centres provided this year and consequently the greater number of population that will be served thereby. Besides treatment of parasitic diseases, these health centres undertake maternal and child welfare activities and observation and treatment of pregnant. Deliveries are attended by the midwives and where necessary pregnant are removed to the in-patient section of the health centres for confinement.

Besides, the house visitor undertakes the instruction and health education of the villagers.

In addition to these activities, these health centres assisted in the control of infectious diseases and epidemics. This was best demonstrated during the cholera outbreak when all the health centres suspended their normal activities and joined in the fight against the cholera epidemic. Their headquarters were used for the isolation of cholera cases. Their medical officers undertook the treatment of patients while the midwives and house visitors undertook nursing. Other personnel were charged with isolation of cases, disinfection and inoculation.

Moreover, these health centres have been instrumental in providing the population with potable water from their own water works, an important factor during the spread of such an epidemic.

The following table No. 39 gives in more detail the various activities of the Rural Health Centres. It is to be remembered that these health centres did not carry any of their normal duties during the cholera epidemic which had lasted three months.

TABLE No. 39.—SHOWING V

Province	Prev							
	Population Served By the Rural health centres	Number of Births	Number of Deaths		Sm. pox Vaccination	No. Diphtheria Inoculations		
			Children 0—5 years	Above 5 years		1st Injection	2nd Injection	3rd Injection
Dakahlia ... ..	154,907	7,639	2,230	2,077	7,008	1,048	853	
Gharbia ... ..	397,568	16,353	4,145	5,703	11,704	1,817	1,486	1
Behera... ..	126,588	5,225	1,468	1,256	4,734	975	879	
Menoufia ... ..	138,611	6,807	2,268	1,761	4,791	1,949	1,878	1
Kaliubia ... ..	85,568	3,785	1,217	929	2,954	448	356	
Sharkia ... ..	168,746	8,411	2,755	2,589	4,628	431	407	
Gîza ... ..	143,924	7,825	2,599	1,401	6,553	1,591	1,396	1
Fayoum ... ..	42,815	2,374	751	490	1,451	488	468	
Beni Suef ... ..	45,406	2,563	492	419	1,102	303	302	
Minia ... ..	223,936	8,308	1,748	1,409	5,640	1,614	1,162	1
Assiut ... ..	216,204	9,129	2,490	1,937	6,578	759	467	
Gerga ... ..	127,524	4,392	743	933	3,819	106	114	
Qena ... ..	195,376	8,246	1,382	1,466	6,645	218	147	
Aswan ... ..	65,029	2,820	891	468	2,818	507	40	
<b>TOTAL ... ..</b>	<b>2,132,202</b>	<b>93,877</b>	<b>25,179</b>	<b>22,838</b>	<b>80,425</b>	<b>12,254</b>	<b>9,955</b>	<b>8</b>

IES OF RURAL HEALTH CENTRES.

Infectious Diseases Cases							Food Inspections			
No.	Typhus	Relapsing	Typhoid	Cholera	Small pox	Other Diseases	Food condemned	No. Food samples examined		
								Genuine	Adulterated	Unfit
	6	5	14	912	—	147	548	354	15	8
1	5	8	11	2222	6	537	469	596	17	11
	2	35	22	367	1	449	379	40	3	—
	—	—	2	309	—	240	721	185	6	11
	4	1	3	117	—	214	52	63	5	—
1	6	—	9	995	3	146	1,131	181	8	22
	—	4	16	78	—	602	1,173	311	8	1
	—	—	—	53	—	71	134	47	2	—
	—	—	—	15	—	16	20	44	1	—
	—	—	10	—	—	308	320	97	1	10
	—	—	15	—	—	61	156	82	3	2
	—	—	6	12	—	110	50	134	12	13
	9	—	6	66	8	5	119	87	2	—
	—	—	1	—	—	8	51	56	1	—
2	32	53	115	5,146	18	2,994	5,323	2,297	84	88

TABLE No. 39.—SHOWING VAR

Medical Service

Province	No. Outpatients		No. Ophthalmic Cases		Operations		Cases Admitted to In-patient	End Exam
	New	Old	New	Old	Out-patient	In-patient		
Dakahlia ... ..	42,686	49,349	2,879	7,275	1,162	—	1,060	26
Gharbia ... ..	85,318	116,251	5,390	13,414	2,435	57	274	47
Behera... ..	41,066	70,353	4,237	4,149	1,619	60	403	17
Menoufia ... ..	59,047	52,487	11,696	46,342	1,600	1	516	35
Kaliubia ... ..	28,194	16,102	1,822	1,731	91	35	81	12
Sharkia ... ..	32,027	31,253	3,794	3,792	863	17	472	14
Gîza ... ..	56,022	32,729	4,900	10,091	991	62	702	18
Fayoum ... ..	11,876	7,136	832	45	45	4	12	4
Beni Suef ... ..	6,549	3,639	981	4,482	94	18	120	6
Minia ... ..	33,932	18,329	14,845	20,727	1,8	12	523	25
Assiut ... ..	26,019	26,263	4,334	4,203	60	—	—	9
Gerga ... ..	15,763	8,536	3,716	2,028	77	—	—	10
Qena ... ..	29,864	20,370	5,959	8,391	127	23	92	5
Aswan ... ..	6,118	5,400	2,134	2,163	—	—	—	—
TOTAL ... ..	474,481	458,297	67,519	126,833	9,312	289	4,855	234

ITIES OF RURAL HEALTH CENTRES (Contd.)

anic Diseases

Diseases												
No. Schistosomiasis Cases				No. Dysentery Cases				No. Cases of intestinal parasites				Pellagra cases
Active	Started treatment	No. Injections	Completed treatment	Positive	Started treat.	injections	Comp. treat	Positive	Carbon Tetra chloride doses	oil che-nopod.	Comp. treat.	
,386	12,093	93,377	8,374	296	242	2,274	114	15,593	1,051	10,038	12,201	195
,167	15,917	137,125	14,807	507	300	1,141	215	26,685	809	15,023	9,348	454
,224	8,388	70,159	4,300	686	500	789	439	11,606	1,716	6,540	5,942	397
,651	14,252	134,848	4,344	97	93	506	74	26,285	325	22,760	4,586	311
,871	7,101	36,370	3,921	35	35	208	33	5,770	1,217	3,449	2,692	58
,416	6,756	38,787	2,679	172	175	1,066	122	6,545	1,090	1,419	1,408	412
,711	9,459	73,098	4,558	54	53	356	52	12,614	5,150	5,136	5,133	351
,797	2,171	15,977	157	—	—	—	—	497	632.5	52	203	—
,443	2,215	18,501	370	15	12	54	8	2,143	1,042	37	825	62
,067	8,234	52,588	1,421	264	167	837	211	7,162	2,604	796	1,514	282
,263	2,764	21,155	776	42	38	372	7	1,182	1,238.25	368.5	561	25
,895	5,716	49,681	2,714	84	77	319	37	2,598	1,736	267.5	1,256	15
,342	908	13,411	826	166	155	911	136	1,767	987	757	313	53
500	452	2,143	113	1	—	6	1	1	—	—	1	—
,733	97,426	758,220	49,360	2,419	1,847	8,839	1,459	118,448	19,597.75	66,643	45,983	2,615

TABLE NO. 39.—SHOWING VARIO

Province	Maternity					
	Pregnants		Number of children	Syph		
	New cases	Old cases		No. Blood tests	No. Positive	No. Started treatment
Dakahlia ... ..	2,628	9,627	28,208	2,024	258	5
Gharbia ... ..	3,253	12,638	52,188	3,161	314	30
Behera ... ..	1,648	9,487	28,563	1,047	105	8
Menoufia ... ..	2,929	10,833	25,571	3,198	290	20
Kaliubia ... ..	1,937	4,977	10,928	1,878	144	10
Sharkia ... ..	3,467	5,117	19,736	1,831	184	1,600
Giza ... ..	2,734	12,255	54,373	3,417	323	30
Fayoum ... ..	486	2,172	9,342	349	9	0
Beni Suef ... ..	599	1,339	6,841	187	11	0
Minia ... ..	2,118	14,154	23,548	2,117	281	20
Assiut ... ..	628	1,572	7,956	529	103	0
Gerga ... ..	203	330	90	317	40	0
Qena ... ..	—	—	—	—	—	—
Aswan ... ..	166	237	935	66	5	0
TOTAL ... ..	22,796	85,038	268,279	20,121	2,067	9,600

ITIES OF RURAL HEALTH CENTRES (Contd)

ild Health

ses		Deliveries			Home Visits		
Arsenio inj.	Bismuth inj.	Home deliveries	Deliveries in Health centres	Total	To pregnant's Prenatal	To post Natal	To Infants
1,751	1,122	2,854	—	2,854	2,697	13,943	5,807
3,371	8,273	3,955	3	3,958	7,721	27,136	24,618
305	43	1,294	5	1,299	2,086	6,621	2,207
1,700	1,780	2,385	12	2,397	4,074	16,541	4,911
1,617	1,164	1,390	12	1,402	2,065	4,662	3,215
1,986	847	2,331	17	2,348	2,592	9,469	4,504
4,536	3,943	4,155	30	4,185	4,488	21,896	11,432
104	—	699	3	702	550	3,948	836
88	96	749	11	760	457	3,939	1,432
2,958	1,123	2,686	8	2,694	6,715	14,337	12,539
263	3	3,231	—	3,231	1,068	12,033	2,087
159	7	228	—	228	115	100	77
—	—	—	—	—	—	—	—
4	—	294	—	294	65	1,823	60
18,842	12,461	26,251	101	26,354	34,693	13,448	73,725

## Chapter VI—QUARANTINE

A.—The main events of the year 1947 were :

(1) The Outbreak of cholera in Egypt at the end of September 1947 and its spread throughout the country after its disappearance since 1902.

(2) The meeting held at Alexandria, on April 1947, of the Committee of Experts of the World Health Organization, for the revision of the Pilgrimage regulations.

The Committee was composed as follows :

*Members :* Dr. GAUD, Director of the Paris International Health Office,  
Dr. C. MANI, Deputy Director General, Indian Medical Services,  
Dr. TH. MORGAN, Medical Officer, London Port Health Office,  
Dr. G. VAN LOGHEM, Professor of Health, Amsterdam University,  
Dr. WASFY OMAR, Director of the Panarab Regional Health Bureau, Alexandria,  
Dr. YEHIA NASRI, ex-Director General of Hygiene, Saudi Arabia.

*Advisers :* Dr. MOHAMED KHALIL BEY, Under Secretary of State for Quarantine,  
Dr. LORENZEN, Director, Sudan Medical Services,  
Dr. E. D. PRIDIE, Health Adviser, British Embassy, Cairo  
H.E. El SHEIKH YOUSSEF YASINE, Minister of Foreign Affairs, Saudi Arabia.

The Committee met at Alexandria during the period 16–20 April, then left for Jeddah on 21–22 April to inspect the sanitary installations and equipment at that port, and resumed its work at Alexandria on the 23rd–26th April. The Committee laid down draft regulations for the transport of pilgrims by land, air and sea routes, the most important provisions of which were :

(1) Protection of pilgrims before leaving their country of origin, by immunizing them against cholera, smallpox, and eventually yellow fever if this exists or is endemic in their country of origin; and their dusting with insecticides if their country of origin is infected with typhus.

(2) Owing to the inadequacy of the sanitary installations, hospital accommodation and isolation facilities at Jeddah port to cope with such large numbers of pilgrims at a time, the Committee was of the opinion that Tor and Kamaran lazarets should be maintained.

(3) If plague, cholera or yellow fever, or if small pox or typhus in epidemic form has not been observed in the Hedjaz during the pilgrimage period, ships will not stop at Tor but proceed direct to Suez, where the pilgrims will undergo medical inspection.

(4) The Committee recommended that pilgrims should not be allowed to cook on board, that they should be provided with beds for sleeping being disposed in two tiers. Further, the draft regulations included provisions governing aerial transport of pilgrims which did not exist in any of the agreements in force.

As regards the cholera epidemic, severe measures were taken by the Quarantine authorities to prevent the spread of the disease to adjoining countries through sea and air navigation.

In spite of the severe precautions and the decision taken by the Egyptian Health Authorities forbidding 15000 pilgrims from proceeding to the Hedjaz, foreign countries enforced against Egypt restrictions which far exceeded the limits provided for in International Sanitary Conventions, e.g. suspension of sea and air navigation with Egypt, forbidding from entry into the country of unvaccinated passengers or those not in possession of certificates of negative stool examinations, even refused merchandise imported from Egypt, such as cotton, etc. all of which are breaches of the sanitary conventions.

When the subject was brought before the Expert Committee on Quarantine at Geneva in November 1947, the Committee unanimously agreed that the provisions laid down in Articles 29 to 34 of the 1926 and 1944 Maritime Sanitary Conventions and Articles 30 to 33 of the 1933 and 1944 Conventions for Aerial Navigation were in every way adequate, and emphasized the fact that Article 15 of the 1926 and 1944 Maritime Conventions could not empower member countries to impose more rigorous quarantine measures than those laid down in the said conventions, namely:

- (i) Surveillance of travellers adequately protected by vaccination,
- (ii) Surveillance of unvaccinated passengers and their medical examination which, in suspected cases, may subject them to supplementary investigation including bacteriological examination of stools and isolation.

B.—MARITIME NAVIGATION

TABLE NO. 40—INFECTIOUS DISEASES REPORTED IN THE PORTS DURING THE YEAR 1947

	Plague			Cholera				Smallpox			Typhus		
	Cases		Deaths	Cases		Deaths		Cases		Deaths	Cases		Deaths
	Local	Imp.		Loc.	Imp.	Loc.	Imp.	Local	Imp.		Local	Imp.	
Alexandria ... ..	12	—	5	194	18	101	9	—	—	—	13	1	8
Port-Said ... ..	—	—	—	4	3	1	—	—	—	—	12	—	—
Suez... ..	—	—	—	30	10	11	—	—	—	—	1	1	—
Tor ... ..	—	—	—	—	—	—	—	—	—	—	2	—	—
Damietta ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Kosseir ... ..	—	—	—	—	—	—	—	2	—	—	2	—	—
Abu Zenima ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Safaga ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Hurghada ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Shellal ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Ras Gharib ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Rosetta ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Abukir ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Mersa Matruh... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Sollum ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—

The last case of cholera in Egypt was reported in Cairo, on 31st December, 1947.

INSPECTION OF VESSELS

As provided for in Article 48 of the Quarantine Regulations, all vessels arriving at Egyptian ports must, before communicating with the shore, be medically inspected.

Vessels arriving from infected ports, are subjected to detailed medical inspection.

In the tables that follow are given:

- (1) List of localities declared infected during the year by the quarantine authority (Table No. 41).

(2) List of localities declared clean during the year by the quarantine authority (Table No. 42).

(3) Number of vessels which have been subjected to simple medical inspection (Table No. 43).

(4) Number of vessels which have been subjected to detailed medical inspection (Table No. 44).

(5) Number of vessels arriving by river routes.

(6) Cases of infectious diseases found on vessels on their arrival at Egyptian ports (Table No. 45)

(7) Passengers (Table No. 46).

(8) Vaccinations carried out on board of vessels in Egyptian ports (Table No. 46).

TABLE No. 41.—COUNTRIES DECLARED INFECTED DURING THE YEAR 1947

Date	Disease	Name of Country	Name of locality considered as infected	Arrivals by :
12 January ...	Smallpox	Burma	Rangoon	All routes
12 „	Plague	Azores Islands	Whole territory	„
31 July... ..	„	Union of South Africa	Johannesburg	Air route
16 November	„	Palestine	Haifa	All routes
16 „	Cholera	India	All ports	„
23 „	Smallpox	Sudan	Equatorial province	„
2 December	„	„	Kassala province	„
3 „	„	Tripolitania	Whole country	„
7 „	„	China	Shanghai	„
7 „	„	French Indochina	Saigon-Cholon	„
24 „	„	Netherland Indies	Kondor group of Islands.	„
24 „	Pneumonic Plague	Union of South Africa	Viljoenskroon district	„
24 „	Small-pox	China	Foochow	„

TABLE No. 42.—RESTRICTIONS WITHDRAWN FROM THE FOLLOWING COUNTRIES

Date	Disease	Name of Country	Name of locality declared clean	Arrivals by :
21 May... ..	Smallpox	Singapore	Singapore	Air and sea routes.
21 „ ... ..	„	China	Hong Kong	„ „
14 August ...	Plague	Union of South Africa.	Johannesburg	„ „
11 September	„	Palestine	Haifa	All routes.
16 „	„	India	Calcutta	„

TABLE NO. 43.—SIMPLE MEDICAL INSPECTION

Port	Cargo vessels	Passenger vessels	Passengers and cargo	Sailing vessels	Oil Tankers	Warships	Various	TOTAL
Alexandria ... ..	432	—	21	61	11	3	—	528
Port Said ... ..	1,401	178	130	258	957	—	242	2,166
Suez... ..	191	13	28	210	192	—	6	640
Tor ... ..	—	—	—	143	—	—	13	156
Kosseir ... ..	3	—	—	107	1	—	—	111
Damietta ... ..	—	—	—	—	—	—	—	—
Rosetta ... ..	—	—	—	49	—	—	—	49
Hurghada ... ..	214	—	—	48	—	—	—	261
Safaga ... ..	1	—	—	13	3	—	—	17
Kantara ... ..	—	—	—	—	—	—	—	—
Sollum ... ..	—	—	—	5	—	—	—	5
Ismailia ... ..	—	—	—	28	—	—	—	28
Abu Zenima ... ..	8	—	—	48	—	—	—	56
Mersa Matruh ... ..	—	—	—	8	—	—	—	8
Râs Ghareb ... ..	25	—	—	3	30	—	—	58
Abukir ... ..	—	—	—	8	—	—	—	8
Borollos ... ..	—	—	—	1	—	—	—	1

TABLE NO. 44.—DETAILED MEDICAL INSPECTION

Port	Cargo vessels	Passenger vessels	Passengers and cargo	Sailing vessels	Oil Tankers	Warships	Various	TOTAL
Alexandria ... ..	1,054	—	191	165	129	21	—	<b>1,560</b>
Port Said ... ..	1,493	299	224	256	777	—	376	<b>3,425</b>
Suez... ..	1,835	286	352	325	1,603	—	101	<b>4,503</b>
Tor ... ..	—	18(*)	—	41	—	—	—	<b>59</b>
Kosseir ... ..	52	—	—	7	2	—	—	<b>61</b>
Damietta ... ..	—	—	—	—	—	—	—	—
Rosetta ... ..	—	—	—	—	—	—	—	—
Hurghada ... ..	37	—	—	36	—	—	—	<b>73</b>
Safaga ... ..	9	—	4	15	1	—	—	<b>29</b>
Kantara ... ..	—	—	—	62	—	—	—	<b>62</b>
Sollum ... ..	—	—	—	—	—	—	—	—
Ismailia ... ..	—	—	—	4	—	—	—	4
Abu Zenima ... ..	—	—	—	—	—	—	—	—
Mersa Matruh ... ..	—	—	—	—	—	—	—	—
Ras Ghareb ... ..	67	—	—	—	31	—	—	<b>98</b>
Abu Kir ... ..	—	—	—	—	—	—	—	—
Borollos ... ..	—	—	—	—	—	—	—	—
Shellal ... ..	552	—	—	648	—	—	—	<b>1,200</b>

(\*) Pilgrim Ships.

# RIVER NAVIGATION

All Nile vessels arriving from the South are subjected to an inspection by the Shellal Quarantine Authority, where passengers are examined and vaccinated, if necessary. Hides and skins, wool and animal products and debris arriving from the South are also controlled at Shellal.

The number of vessels which arrived at Shellal in 1947 was : 1,200, including 103 express passenger, steamers, 82 ordinary passenger steamers, 26 special passenger steamers, 341 cargo and passenger vessels, and 648 sailing vessels.

No cases of quarantinable or infectious diseases were found on board.

The Shellal Quarantine Office carried out the vaccination of 1,008 passengers against small-pox and 1,489 passengers against cholera. The Office controlled also the certificates of inoculation against yellow fever, but no passenger was isolated at the lazaret on account of irregular certificates of inoculation.

TABLE NO. 45.—QUARANTINABLE AND INFECTIOUS DISEASES CASES FOUND ON BOARD VESSELS

<i>Alexandria :</i>	5 vessels, on board of which were found :
	3 cases of suspected typhoid.
	1 case of malaria.
	1 „ of fever.
<i>Port-Said :</i>	5 cases of typhoid.
	2 cases of chickenpox.
	1 case of dysentery.
	2 cases of influenza.
	2 „ of measles.
	2 „ of T.B.
	2 „ of enteric fever
	1 case of fracture of thigh.
	2 cases of bronchitis.
	1 case of non epidemic. meningitis
	1 „ of adenitis.
	3 cases of pneumonia.
	1 case of inguinal adenitis.
	2 cases of inguinal abscess.
	1 case of colitis.
	1 „ of nephritis
<i>Suez :</i>	2 vessels from which were landed 3 cases of quarantinable diseases : viz :
	1 case of smallpox on S.S. "Empire Clyde."
	2 cases „ „ "Amersham."
	Infectious diseases :
	3 cases of typhoid.
	379 cases of malaria.
	28 „ chickenpox.
	23 „ mumps.
	43 „ measles.
	100 „ influenza.
	131 „ dysentery.
	10 „ whooping cough.
	150 „ T.B.
	18 „ pneumonia
	44 „ tuberculosis.
	3 „ hepatitis (contagious).
	1 case of leprosy.
	3 cases of tonsillitis.
	1 case of simple pneumonia.
	3 cases of smallpox.

TOTAL : 940 cases on board 186 vessels.

TABLE NO. 46.—CONTROL OF PASSENGERS  
A. (LANDING)

Port	I and II Classes	III and IV Classes	TOTAL
Alexandria ... ..	17,459	9,097	26,556
Port-Said ... ..	22,545	92,510	115,055
Suez ... ..	2,071	15,910	17,981
Tor ... ..	—	(pilgrims)	16,967
Kosseir ... ..	—	—	—
Kantara ... ..	—	{ 23,865 (1) 757 (2)	{ 24,622 .....
Shellal ... ..	8,842	17,441	26,283
Safagha ... ..	45	—	45
Hurghada ... ..	—	—	—
Ras Ghareb ... ..	—	—	530
Mersa Matrouh ... ..	—	—	—
Sollum ... ..	—	—	—
Ismailia ( <i>land route</i> ) ... ..	4,026	—	4,026

B. (EMBARKING)

Alexandria ... ..	13,988	8,931	22,919
Port-Said ... ..	25,428	52,745	78,173
Suez ... ..	2,487	3,653	6,140
Tor ... ..	—	pilgrims	16,964
Kosseir ... ..	—	—	—
Shellal ... ..	10,158	10,659	20,817
Safagha ... ..	45	—	45
Kantara ... ..	—	17,763 (3)	17,763
Ismailia ... ..	2,437	—	2,437
Ras Ghareb ... ..	—	—	501

(1) Arriving by train.

(2) Arriving by camels.

(3) Leaving by train.

No pilgrim arrived in transit for the Hedjaz on account of the cholera epidemic.

VACCINATIONS CARRIED OUT ON BOARD VESSELS

*Alexandria*: 559 members of crew of 21 vessels were vaccinated against cholera.

22 members of crew of a vessel against smallpox.

*Suez*: 73 members of crew of the S. S. "Leomedan," from which two cases of smallpox landed at Aden, were vaccinated against smallpox.

all members of the crew of the S.S. "Amersham" from which were landed 2 cases of smallpox at Suez, were vaccinated against smallpox.

97 persons were vaccinated against cholera, of which 3 from the S.S. "British Lord", 2 from the S.S. "City of Duncaster", 76 from the S.S. "Mary", 3 from the S.S. "City of Tokio".

## C.—CONTROL OF AERIAL NAVIGATION

Three years have elapsed since the cessation of hostilities and many of the obstacles preventing the development of civil aviation are now removed.

To-day the vigorous competition is on foot among aircraft producing countries in an endeavour to produce the safest, most comfortable and spacious aircraft for both passengers and goods transport.

These developments will eventually lead to an augmentation of air activity and substantial increase in the number of air passengers.

Herebelow is a summary of the activities at the various Egyptian aerodromes.

### *Almaza :*

This was the principal aerodrome where civil and military aircraft landed. Aerial traffic in this aerodrome compared with the busiest in the world. Since the end of March 1947 military aircraft have ceased to land in this aerodrome following the evacuation of the British troops from Cairo, Alexandria and the Delta.

The sanitary service in this aerodrome is efficient and is capable of coping with any emergency.

### *Farouk Airport :*

In 1947, the Egyptian Government took possession of the "Payne Field" aerodrome then belonging to the U.S.A. Forces. Afterwards the aerodrome was named Farouk Airport. Air traffic through this aerodrome is increasing every day and is a serious competitor to Almaza aerodrome.

### *Rod el-Farag :*

Used only by sea planes, the number of which is very small.

### *Luxor :*

This aerodrome is considered as the front line stronghold in the protection of the country against the penetration of yellow fever from the South. Under Ministerial Arrêté of August 20, 1945, every aircraft coming from yellow fever infected areas must first land at this aerodrome.

### *Khartoum Liaison Office :*

This office was created for the purpose of controlling the disinfection of aircraft destined for Egypt before their leaving the Sudan and ascertaining the state of health of passengers. In fact, this office prevented many passengers who had not complied with sanitary regulations from proceeding to Egypt.

### *Mariut Aerodrome (Alexandria) :*

A. *Land Aerodrome.*—This aerodrome is still under construction. The number of aircraft landing there is small and consists mainly of small aircraft engaged in internal navigation. It is expected that this aerodrome will be in a position to receive large aircraft during the year 1948. Lately, this aerodrome was named FOUAD EL AWAL AERODROME.

B. *Sea Base.*—Still under construction and probably will not be ready to receive sea planes before the second half of 1948.

### *Fayed Aerodrome :*

The activity in this aerodrome started with the evacuation by British Forces of Alexandria, Cairo and Delta towards the end of March 1947. The aerodrome is used for the landing of the Royal Air Force Aircraft. Formerly the Egyptian Sanitary Authorities had no control over air traffic at that aerodrome. An agreement was concluded with the military authorities enabling Egyptian officials to exercise control over aircraft landing at that aerodrome. As a result of that agreement, an Egyptian Medical Officer, assisted by a supervisor, was stationed at Fayed as from October 1, 1947.

### *Mersa Matrouh :*

As from October 1, 1947, aircraft started to land at that aerodrome. A Medical Officer, assisted by a supervisor, is carrying out quarantine duties. Actually, the number of aircraft landing there is extremely small but it is expected that air traffic will increase after its completion as the Government is anxious to make of Mersa Matruh a first class summer resort.

On July 9, 1947, a Ministerial Arrêté was issued providing for the following :

(1) All aircraft arriving through West or North Africa routes from countries which the Ministry of Public Health considers as yellow fever infected areas, must make their first landing at Mersa Matruh aerodrome, before proceeding to internal aerodromes.

(2) Should such aircraft be unable to land at Mersa Matruh on account of atmospheric conditions, or inadequacy of the aerodrome to such landing, it shall proceed directly to Cairo aerodromes. The pilot must have the aircraft disinfected while in the air by means of a recognised pyrethrum solution. On his arrival, he shall advise the aerodrome authorities of the completion of this operation.

(3) Aircraft arriving from or landing en route in any of the countries considered by the Ministry of Public Health as yellow fever infected areas shall be disinfected on arrival at the first Egyptian aerodrome.

TABLE NO. 47.—AIRCRAFT DEALT WITH DURING 1947

Name of Airport	Landing	Departing	Aircraft disin- fested	Reconnaissance	Arraisionement
<b>CAIRO :</b>					
Farouk Airport ... ..	1,673	1,610	—	—	—
Almaza Airport ... ..	6,955	6,879	572	2,345	4,610
Rod el Farag Seaport... ..	771	772	4	—	—
Luxor : ... ..	720	720	720	—	720
<b>ALEXANDRIA :</b>					
Fouad el Awal ... ..	75	59	7	—	75
PORT-SAID ... ..	4	4	—	—	—
MERSA MATRUH ... ..	5	5	—	—	—
FAYED (Military) ... ..	391	304	96	—	391
<b>TOTAL ... ..</b>	<b>10,594</b>	<b>10,353</b>	<b>1,399</b>	<b>2,345</b>	<b>5,796</b>

TABLE NO. 48.—PASSENGERS LANDING FROM AIRCRAFT.

Name of Airport	Landing	Departing	Transit	Isolated
CAIRO :				
Farouk Airport ... ..	12,183	11,666	—	218
Almaza Airport ... ..	60,476	59,483	37,670	108
Rod el Farag Seaport... ..	1,256	13,336	12,287	—
ALEXANDRIA :				
Fouad el Awal ... ..	411	261	—	—
LUXOR ... ..	—	—	5,451	—
FAYED ... ..	1,541	1,381	702	—
MERSA MATRUH ... ..	—	—	10	—
TOTAL ... ..	75,867	86,427	56,120	326

#### D.—ANTIPLAGUE WORK

This chapter includes details of rat catching in town and port carried out in Alexandria, Port-Saïd and Suez and their identification by the laboratories.

As regards the fumigation of vessels in conformity with article 28 of the International Sanitary Convention of 1926, modified in 1938, masters of vessels are given—since 1943—the option to have their vessels fumigated, either by the Quarantine Administration, which carries out this operation by the Clayton Gas process, or by the Imperial Chemical Industries, which carries out this operation by the Cyanide process, under the supervision of the Quarantine Administration.

TABLE NO. 49.—NUMBER OF RATS CAUGHT, DESTROYED AND EXAMINED IN THE PORTS

Number and species of rats caught		Alexandria	Port Said	Suez
R. Norvegicus ... ..	Town ... ..	11,400	8,999	2,181
	Port ... ..	630	821	253
R. Rattus ... ..	Town ... ..	4,474	76	—
	Port ... ..	847	1,256	25
Acomys Cahirinus ... ..	Town ... ..	1,248	1	642
	Port ... ..	120	—	170
TOTAL ... ..		18,719	11,153	3,271
Mice caught ... ..	Town ... ..	11,854	967	45
	Port ... ..	3,750	2,702	115
Rats killed or found dead ... ..		4,667	279	—
No plague infected rats were found during the year.		—	—	—
Rats found dead after fumigation on vessels (R. Rattus) ...		271	57	84
Rats caught alive on vessels (R. Rattus) ... ..		8	—	—
Number of vessels on which were caught the above rats :		33	8	7

TABLE No. 50.—FLEAS FOUND ON RATS CAUGHT

A.—ALEXANDRIA

Fleas found on :	Town		Port		TOTAL
	L.M.	X. Ch.	L.M.	X.Ch.	
R. Norvegicus ... ..	1,594	2,730	290	362	5,976
R. Rattus ... ..	340	944	529	1,076	2,889
Acomys ... ..	—	—	—	—	—
					<b>8,875</b>

B.—PORT-SAID

R. Norvegicus ... ..	590	1,494	73	317	2,474
R. Rattus ... ..	13	39	78	395	525
Acomys ... ..	—	—	—	—	—
					<b>2,999</b>

C.—SUEZ

R. Norvegicus ... ..	—	2,397	—	136	2,533
R. Rattus ... ..	—	—	—	—	—
Acomys ... ..	—	—	—	—	—
					<b>2,533</b>

L.M. = Leptopsylla Musculi.

X. Ch. = Xenopsylla Cheopis.

TABLE No. 51. —VESSELS DERATISED

(a) Vessels deratised by the Quarantine Administration, by the Clayton process (SO<sub>2</sub>).

Port	Steamers	Sailing vessels and launches	TOTAL
Alexandria ... ..	—	42	42
Port-Saïd ... ..	8	1	9
Suez ... ..	—	—	—
<b>TOTAL ... ..</b>	<b>8</b>	<b>43</b>	<b>51</b>

(b) Vessels deratised by the Imperial Chemical Industries, Ltd., under the supervision of the Quarantine Administration :

Alexandria ... ..	19	1	20
Port-Saïd ... ..	2	—	2
Suez ... ..	10	—	10
<b>TOTAL ... ..</b>	<b>31</b>	<b>1</b>	<b>32</b>

(c) Certificates of Exemption from Deratisation issued by :

Alexandria ... ..	97	35	132
Port-Saïd ... ..	115	49	164
Suez ... ..	63	101	164
Kosseir ... ..	—	46	46
Ismailia ... ..	—	11	11
<b>TOTAL ... ..</b>	<b>275</b>	<b>242</b>	<b>517</b>

# E.—PILGRIMAGE OF YEAR 1366 OF THE HEGIRA

1st September—26th November 1947

A notice was published by the Quarantine Administration in the Official Journal of August 30, 1947, enforced as from September 1, 1947, the usual sanitary provisions regarding the control of pilgrims transiting Egyptian territory on their way to the Hedjaz. These provisions which do not differ from those enforced in previous years, remained in force until the departure of the last pilgrim ship from Suez on 6th October.

As from that date, measures for the control of returning pilgrims as published in the Official Journal of September 22, 1947, were instituted and remained in force until the closure of Tor Camp and the termination of the pilgrim season on November 30, 1947.

## *Outward Journey :*

(A) *Egyptian Pilgrims*.—The number of applications received from Egyptian pilgrims reached 22,000 but in view of the outbreak of cholera at the end of September, the Egyptian Government decided to ban the departure of pilgrims so as to prevent the possible spread of cholera to other countries. As a result, 15,000 pilgrims were prevented from proceeding to the Hedjaz. The total number of pilgrims who left Suez for Jeddah between 9th September and 6th October was 6,887, that is to say the number who had already left before the ban.

*Vaccination and inoculation.*—All Egyptian pilgrims were immunized before departure in the same manner as in previous years. They received a double dose of anticholera and typhoid vaccines and were also vaccinated against small pox in conformity with the rules laid down in 1945.

*Transport of Pilgrims.*—The transport of Egyptian pilgrims to and from the Hedjaz was carried out by the Misr Shipping Co., which assigned for this purpose the vessels "Misr" and "Sudan". The SS "Taif" and "Talodi" belonging to the Khedivial Mail Co., carried foreign pilgrims as well as Egyptians. All these vessels were inspected and measured by the Quarantine authorities before being allowed to carry pilgrims. A certificate of measurement was given to each according to the 1926 I.S.C.

(B) *Foreign Pilgrims.*—Foreign pilgrims who transit Egyptian territory on their way to the Hedjaz generally consist of (1) those arriving at Port-Said on board pilgrim ships bound for Jeddah in transit through the canal, (2) pilgrims arriving by train from Palestine *via* Kantara to Suez, where they embark on pilgrim ships for Jeddah; (3) pilgrims arriving by train from Lybia at Sollum, thence to Alexandria and Suez for embarkation for Jeddah; (4) pilgrims arriving at Port-Said and Alexandria on ordinary vessels thence proceeding to Suez by land to embark there for Jeddah.

(a) *Pilgrims in transit through the Canal.*—Ten pilgrim ships carrying 8,912 pilgrims arrived at Port-Said on their way to Jeddah through the Canal.

Of these pilgrims, 5 were Chinese, 609 Saoudians, 5 Iraqis, 5 Afghanis, 258 Lebanese, 619 Moroccans, 1,408 Palestinians, 195 Senegalese, 2,168 Syrians, 234 Tunisians, 3,392 Turks, 5 French, 8 Cyprians.

All pilgrims were inspected on arrival and found in possession of valid certificates of inoculation. The measurement and sanitary condition of ships were checked and found satisfactory, apart from the S.S. "Amarapura" which carried a number of pilgrims in excess of the number authorised by International Sanitary Conventions.

(b) *Pilgrims from Palestine.*—On account of the outbreak of cholera, the number of pilgrims who arrived by train from Palestine *via* Kantara was limited, and did not exceed 42 pilgrims. The remainder embarked *via* Haifa or Beirut on pilgrim ships which transited the Canal. The 42 pilgrims who arrived by train were all Turks, of whom 30 were not vaccinated against cholera and small pox and 2 not vaccinated against cholera. The vaccinations were completed before the pilgrims were allowed to proceed.

(d) Pilgrims arriving at Port-Saïd on board ordinary ships :

16 Turks

3 Cyprians

*Departure from Suez :*

A total of 7,256 pilgrims left Suez for Jeddah in 8 batches on board pilgrim ships during the period from 9th September, to 6th October, as against 23,607 pilgrims, including 19,307 Egyptians, in the previous pilgrim season.

RETURN JOURNEY

In 1947, Yom Arafat coincided with the 19th October. The first Egyptian pilgrim ship *S.S. Sudan* with 1,437 Egyptian pilgrims arrived at Tor on the 2nd of November. The same day, *S.S. "Taif"* arrived carrying 627 pilgrims (Palestenians). As the pilgrimage had not yet been declared net, the pilgrims of the *S.S. "Taif"* were landed and maintained in quarantine during the statutory period. Samples of stools were taken from all pilgrims and members of the crew of the two above-mentioned vessels. On the 4th of November, *SS. "Misr"* arrived carrying 1,494 pilgrims, all Egyptians. As no case of quarantinable disease was found on the three vessels, and the result of the examination of stools was proved negative, the pilgrim season was declared "clean" on the 5th of November, and the provisions of Article 142 of the 1926 International Sanitary Convention, were applied. The last ship *S.S. "Tania"* arrived on the 26th November. The season thus lasted 24 days, from 2nd to 26th of November and the camp was declared closed on the 30th of November.

During that period, 18 vessels arrived at the Lazaret of which 5 carried Egyptian pilgrims. Apart from the *S.S. "Taif"* the 12 pilgrim ships carrying foreign pilgrims numbering 8,626, were not detained for observation but, after medical inspection at the camp, were allowed to proceed in quarantine to their respective destinations through the Suez Canal in conformity with article 142 of the International Sanitary Convention.

The number of Egyptian pilgrims landed at Tor was 7,279 of which 6,726 arrived by the *S.S. "Misr"* and "*Sudan*". The total number of foreign pilgrims was 9,688.

Hereafter is a list of pilgrim ships which arrived at Tor :

TABLE No. 52.—PILGRIM SHIPS ARRIVED AT LOR

Name of Vessel	Net Tonnage	Date of arrival	Date of Departure	Number of Pilgrims			
				Egypt.	Foreigners	Total	Destination
Sudan ... ..	5,029	2 Nov.	5 Nov.	1,437	—	1,473	Suez
Taif ... ..	770	2 „	5 „	—	627	627	Haifa.
Misr ... ..	5,050	4 „	7 „	1,493	1	1,494	Suez.
Tania ... ..	450	4 „	5 „	—	261	261	Beirut.
Yusef Rida ... ..	427	5 „	5 „	—	201	201	Stambul
Misr ... ..	5,050	9 „	12 „	1,453	1	1,454	Suez.
Zamalek ... ..	929	9 „	12 „	71	51	122	Suez
Amarapura ... ..	5,940	11 „	11 „	—	1,613	1,613	Beirut.
Izmir ... ..	3,021	11 „	11 „	—	240	240	Stambul
Misr ... ..	5,050	13 „	13 „	1,433	8	1,441	Suez.
Talodi ... ..	770	13 „	13 „	—	644	644	Haifa.
Athos II ... ..	8,947	14 „	14 „	—	1,754	1,754	Beirut.
Tania ... ..	450	15 „	15 „	—	263	263	Beirut.
Misr ... ..	5,050	17 „	20 „	1,388	78	1,466	Suez
Taif ... ..	770	23 „	23 „	—	591	591	Haifa
Sudan ... ..	5,029	24 „	24 „	2	1,568	1,570	Beirut.
Amarapura ... ..	5,940	25 „	25 „	2	1,611	1,613	„
Tania ... ..	450	26 „	26 „	—	176	176	„
TOTAL ... ..				7,279	9,688	16,967	

Comparative table of nationalities of pilgrims landing at Tor during the last three pilgrim seasons.

TABLE No. 53

Nationalities	1364 of Hegira 1945 A. D.	1365 of Hegira 1946 A. D.	1366 of Hegira 1947 A. D.
Egyptians ... ..	15,656	20,395	7,279
Afghanis ... ..	8	17	7
Algerians ... ..	9	604	687
Chinese ... ..	2	—	—
Saudians... ..	155	71	81
Indians ... ..	11	11	18
Iraqis ... ..	585	916	9
Javanese... ..	1	1	—
Iranians ... ..	7	—	—
Lebanese ... ..	501	654	367
Moroccans ... ..	13	580	830
Palestinians ... ..	1,125	2,081	1,389
Syrians ... ..	4,146	2,884	1,652
Transjordans ... ..	23	54	13
Tripolitans ... ..	140	42	—
Turks ... ..	87	44	4,358
Russians ... ..	17	—	—
Tunisians ... ..	5	233	263
Cyrenaica ... ..	1	4	—
Sudanese ... ..	3	—	1
Senegalese ... ..	4	177	—
French ... ..	2	6	—
Yugoslav ... ..	1	—	—
Kurds ... ..	2	—	—
Yemenite ... ..	—	1	—
Sierra Leone ... ..	—	7	—
Union of South Africa ... ..	—	20	—
Cyprians ... ..	—	5	—
British ... ..	1	20	10
Other Nationalities ... ..	—	2	3
TOTAL ... ..	22,505	22,826	16,967

HOSPITAL AND LABORATORY

65 persons were admitted to hospital, including 54 Egyptians, 4 Palestinians, and 7 from the camp staff (41 men, 22 women, and 2 children).

The cases treated were as follows:

Medical cases :	Surgical cases :
11 Chickenpox.	1 wound.
5 influenza	2 fracture (light).
2 bronchitis.	1 fracture with complication.
1 sun stroke	2 septic ulcers
12 dysentery	2 septic wounds.
1 hepatitis.	3 abscesses.
3 diabetes with light wounds.	1 strangulated hernia.
3 senility	1 prostatitis with uraemia.
1 auricular fibrillation.	1 gynaecology.
3 uraemia.	1 miscarriage.
3 renal colic.	1 stomatology.
1 lumbago.	
2 scabies.	
1 child accompanying sick parent	
—	—
TOTAL ... 49	TOTAL ... 16 cases

The number of outpatients, totalling 186, included pilgrims, camp staff, and their families.

9 surgical operations were carried out.

The number of deaths at the hospital was 4, three Egyptian pilgrims and a non pilgrim. The causes of death were :

- 1 dysentery (male)
- 1 diabetes mellitus with septic wounds (female)
- 2 uraemia (men).

F.— DISINFECTION AND CONTROL OF WATER DISTRIBUTION

TABLE NO. 54.—DISINFECTION BY CHEMICAL MEANS

	Alexandria	Port-Said	Suez	Shellal	Tor
Vessels disinfected ... ..	—	1	—	—	18
Cabins occupied by sick ... ..	—	18	6	—	—
Barges and boats ... ..	61	441	31	—	—
Holds of vessels disinfected ... ..	54	—	—	—	—
Railway trucks and motor cars ... ..	97	4	35	—	—
Effects of disinfection personnel ... ..	642	—	—	—	—
Pilgrim effects by formol ... ..	—	—	—	—	44
Vessels disinfected for destruction of mosquitoes ... ..	—	—	306	—	—
Boats carrying sick ... ..	—	17	—	—	—
Vessels carrying animals ... ..	37	1	7	—	—

TABLE NO. 55.—DISINFECTION BY STEAM UNDER PRESSURE

	Alexandria	Port-Said	Suez	Shellal	Tor
Rags and jute ... .. } Kilog. ... =Parcels ...	698,664 489	— —	— —	— —	— —
Used clothings ... .. } Kilog. ... =Parcels ...	84,331 486	— —	— —	— —	— —
Post parcels ... .. } Kilog. ... =Parcels ...	3,137 222	— —	— —	— —	— —
Effects of porters ... ..	—	—	398	—	—
Parcels disinfected ... ..	—	4	—	—	—
Parcels and effects belonging to the Administration ... ..	—	—	K. 792	—	35
Effects of crew of sailing vessels ... ..	—	—	K. 118	—	—
Effects of pilgrims ... ..	—	—	„ 140	—	—
Effects of passengers ... ..	—	—	„ 896	—	—
Effects from steamers... ..	—	—	„ 156	—	—
Parcels disinfected against payment ...	—	K. 6,757 =72parcels	—	—	—
Mooring boats	—	—	48	—	—
Parcels disinfected at Customs expense. ... .. } Kilog. ... —56 parcels...	5.100	—	—	—	—
Baggage ... ..	—	—	K. 1.742	—	—
Number of stovefulls ... ..	—	155	—	—	—

TABLE NO. 56.—CONTROL OF WATER DISTRIBUTION TO VESSELS IN THE PORTS

	Alexandria	Port-Said	Suez
Number of specimens taken from taps supplying vessels ... ..	375	530	135
Number of specimens taken from water boats	105	163	161
<i>Result of bacteriological examination :</i>			
Specimen found fit for use :			
taps . ... ..	313	75	89
water boats ... ..	94	250	54
Unfit for use :			
taps ... ..	62	88	46
water boats ... ..	11	280	107
Number of cisterns and water boats disinfected ... ..	54	176	30

— 20 —

(G) *Control of Skins and Animal Products and Debris — Rags  
and used Clothings*

Under quarantine regulations, all consignments of hides and skins, wool, animal products and debris must be accompanied by a sanitary certificate issued by the country of origin, certifying that the country is free from animal disease. In case of consignments arriving without such a certificate, the owner has the option either to have samples taken for bacteriological examination, or to have the consignment re-shipped to a destination abroad. If the bacteriological examination proves negative, the consignment is given [ free pratique.

Hereafter are details of the consignments arriving in Egyptian ports or exported therefrom and results of samples examined in the quarantine laboratory for consignments arriving without certificates.

TABLE No. 57

Nature of consignment	Alexandria			Port-Said			Suez			Shellal		Tor		Kantara	
	Imported	Exported	Transit	Imported	Exported	Transit	Imported	Exported	Transit	Imported	Exported	Exported	Exported	Exported	Transited
	Kilogr.	Kilogr.	Kilogr.	Kilogr.	Kilogr.	Bales	Kilogr.		Kilogr.	Consignt.	Consignt.	Kilogr.	Kilogr.	Bales	
Ox hides ... ..	60,615	8,983	6,800	27,577	4,934	2,740	479,660	—	124,897	44	—	367	—	106	
Sheep and goat skins ...	Pieces 7,430	Pieces 607	Pieces 26,500 & 14 bales	—	—	—	Pieces 2,577	—	Pieces 6,990	—	—	Pieces 351	—	—	
Salted guts... ..	Kilogr. 4,317	Kilogr. 20,765	—	—	—	—	Kilogr. 42	—	—	—	—	—	—	—	
Horns and hoofs ... ..	—	90,000	—	—	—	—	—	—	—	—	—	—	—	—	
Wool ... ..	566,485	190,237	Kilogr. 1	154,047	—	2,531	1,350,365	—	Kilogr. 10,073	12	17	—	—	—	
Calcinated hair ... ..	9,223	164,689	—	—	—	—	—	—	—	—	—	—	22,640	—	
Animal hair ... ..	35,827	120,350	78,438	—	—	—	Kilogr. 144	—	Kilogr. 168	3	—	—	—	—	
Human hair ... ..	—	—	—	—	—	—	679	—	—	—	—	—	—	—	
Reptile skins ... ..	—	—	—	—	—	—	Pieces 1,100	—	—	—	—	—	—	—	
CONTROL OF RAGS, USED CLOTHES, ETC.															
Rags: Kilogr. ... ..	16,371	10,984,772	—	—	—	—	—	55,371	—	—	—	—	—	—	
Used clothes: kilogr. ...	48	70,695	111	—	—	—	—	—	—	—	—	—	—	—	
Used jute ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Used Blankets: kilogr. ...	—	—	—	—	—	—	1,733	—	—	—	—	—	—	—	

TABLE No. 58.—DETAILS OF SAMPLES EXAMINED

Nature of Sample	Number	Positive for anthrax	Negative result
ALEXANDRIA :			
Wool ... ..	138	—	138
Hides and skins ... ..	29	—	29
Hair ... ..	9	—	9
Salted intestines ... ..	7	1	6
Shaving brushes ... ..	24	—	24
Sheep fur tanned ... ..	1	—	1
SUEZ :			
Hides ... ..	50	33	17
Hair... ..	1	—	1
PORT-SAID :			
Wool ... ..	26	—	26
Hides and skins ... ..	27	4	23
Shaving brushes ... ..	1	—	1
SHELLAL :			
Wool ... ..	15	—	15
Hides and skins ... ..	12	—	12
Animal hair ... ..	10	—	10
ALMAZA (CAIRO) :			
Wool ... ..	10	—	10
Hides and skins ... ..	1	1	—
Shaving brushes ... ..	8	—	8
Animal hair ... ..	1	—	1
ROD EL-FARAG (CAIRO) :			
Wool ... ..	6	—	6
ISMAILIA :			
Wool ... ..	1	—	1
TOTAL ... ..	377	39	338

## PART II—SOCIAL HYGIENE

### Chapter VII—MATERNITY AND CHILD WELFARE

Hereunder are statistical details of the activities of the Maternity and Child Welfare Centres during the year 1947.

TABLE No. 59

Cases	Number
Old Pregnants ... ..	462,149
New Pregnants ... ..	132,855
Children attending Centres ... ..	1,554,830
Blood specimens for Wassermann test ... ..	40,413
Blood specimens returned positive for Wassermann Reaction ... ..	2,584
Confinements attended by midwives ... ..	14,195
"    "    assistant midwives ... ..	92,049
"    "    medical officers ... ..	360
"    within in-patient departments ... ..	2,685
Total number of confinements ... ..	109,289
Confinements from outside (not previously recorded) ... ..	8,468
"    referred to hospitals ... ..	2,433
Full term still births	944
Premature " (within first 3 months of pregnancy)... ..	98
"    "    ( " second 3 months of pregnancy) ... ..	205
"    "    ( " third 3 months of pregnancy) ... ..	359
Maternal mortality due to childbirth ... ..	30
Infantile mortality within first month of life ... ..	670
Midwife visits to pregnant during 9th month ... ..	18,477
Medical officer visits to sick puerperals ... ..	2,823
Midwife visits to puerperals ... ..	181,427
Other visits ... ..	20,043
Visits to pregnant ... ..	1,744
"    infants ... ..	60,568
Cases of Eclampsia ... ..	55
"    Laceration of perineum ... ..	640
"    Placenta Praevia ... ..	26
Visits to puerperal fever cases ... ..	204
Urine samples ... ..	431,297
Ante partum albuminuria ... ..	6,797
Lectures delivered by medical officers ... ..	5,326
"    "    midwives ... ..	7,529
"    "    health visitors ... ..	10,396
Milk contributions to mothers and babies in kilogrammes ... ..	248,588
Ready made clothes contributed to mothers and babies ... ..	4,430
Cloth material (per metre) contributed to mothers and babies ... ..	5,386

## Chapter VIII—CHEST DISEASES

Since the campaign against Tuberculosis was first launched in Egypt in 1929 up till the end of 1946, a total of 69173 positive T.B. cases were recorded. A further 7446 cases were detected during the year 1947, making a total of 76,619 cases at the end of 1947.

During the year, the following units were opened :

- (1) A branch of Port-Saïd Chest Diseases Dispensary at Ismailia on 7/8/1947.
- (2) A branch of Suhag Chest Diseases Dispensary at Akhmin on 7/10/1947.
- (3) Farouk I Sanatorium at Mehalla El Kobra with an accommodation of 150 beds on 13/12/1947.
- (4) Fouad I Sanatorium was transferred from Helwan to Almaza on 10/3/1947 with an increase of its accommodation from 550 to 850 beds.
- (5) The Princess Khadiga Abbas Halim Hospital for Bones was transferred from its building to the Fouad I Sanatorium building at Helwan on October 1947.
- (6) The preventorium at Zeitoun was transferred to the building of Princess Khadiga Abbas Halim Hospital for Bones at Helwan on 27/12/1947.

The Chest Diseases units are now as follows :

- 19 Dispensaries.
- 14 Branch Dispensaries.
- 12 In-Patient Sections within Dispensaries.
- 5 Sanatoria.
- 2 Surgical T.B. Institutions.
- 4 Preventoria.
- 1 Colony for Convalescents.

The following are the occupations of new T.B. patients detected during the year 1947 :

- 456 Tradesmen : consisting of 89 foodstuff vendors, 72 poultry and cattle merchants, 122 grocers, 45 fruiterers, and 128 other trades.
- 562 Employees : including 264 civil employees, 102 commercial employees, 56 teachers, and 140 other employments.
- 2050 Craftsmen : consisting of 72 cooks, 53 waiters, 130 barmen, 58 domestic servants, 52 servants (farrashes), 51 gate-keepers, 96 barbers, 66 laundrymen, 127 drivers, 97 tailors, 132 shoemakers, 128 carpenters, 64 painters, 73 building labourers, 114 employees in firms, 152 weavers, 140 mechanics, 47 printers, and 398 other occupations.

1,554 farmers

202 pupils

2622 Unemployed: including 1823 invalids, 400 children, and 399 unemployed.

Of 135,960 new patients examined during the year, 7446 were found positive for tuberculosis. Of these 279 were children and the remaining 7167 were adults.

Of 6465 contacts (2792 children and 3673 adults) examined, 236 developed tuberculosis.

Health visitors paid 31,154 visits this year and the medical officers 4,578 visits to tuberculosis patients.

Appended to this report are detailed statistical data of the work carried out by the various dispensaries and other institutions.

## RESUME OF ACTIVITIES IN MEDICAL AND SOCIAL SPHERES

Medical, social and preventive activities proceeded according to plan. During this year, the following measures were undertaken:

I. — The premises of Fouad I Sanatorium in Helwan aroused no small anxiety since the building was too old. It was constructed in 1903 to serve as a hotel. No consideration was given to the basic principles and requirements of treatment institutions. It was handed over to the Ministry of Public Health by the Ministry of Wakfs in 1932. On examination, the State Buildings Dept. pronounced the building unsafe. Notwithstanding the prompt and urgent repairs which cost about L.E. 7500, the condition of the building remained unsatisfactory. An estimate of overall repairs had been set by the State Buildings Dept. at L.E. 150,000 which equals L.E. 600,000 at present currency rates. This large sum is sufficient to build a few sanatoria.

Since Helwan is a universal winter resort with abundant mineral springs, and since the presence of the Sanatorium had an adverse reputation on Helwan, the High Tourist Council, proposed the removal of the Sanatorium from Helwan. The Ministry availed itself of the opportunity of evacuating the Huckstep U.S. Military Hospital at Almaza on the termination of the war and decided to remove the Sanatorium thereto, since it proved an ideal place for the purpose. It has an area of 300 acres as against 10 acres at Helwan which restricted occupational therapy. It is now proposed to cultivate a large wood for this purpose. The Sanatorium was transferred to Almaza on 10/3/1947. The new Sanatorium has a capacity of 1200 beds. The present accommodation of 550 was increased to 850 beds. It is well supplied with a sewage disposal system, which was deficient in the Helwan premises, and other facilities, e.g. light, water and electricity.

This Sanatorium is now reserved for the accommodation of male patients and Abbassia Hospital for females.

### II. — *Mehalla El Kobra Sanatorium :*

Mehalla El Kobra is an industrial centre with many thousands of workmen. A Chest Diseases Dispensary set up in 1938 revealed the presence of a large number of T.B. patients among the workmen. The provision of an in-patient unit to deal with the situation became essential. Under agreement between the Misr Society for Spinning and Weaving and this Ministry, the former undertook the provision of the site and the construction of a hospital with an initial accommodation of 150 beds capable of future expansion to 300 beds. The Ministry undertook its equipment and administration. The foundation stone was laid in 1939. It will be handed over next year. It is built on modern hospital style.

### III. — *Treatment of Students :*

The Ministry of Finance agreed in 1947 to reserve 30 beds in 3rd Paying Class for students with T.B. The Sanatorium started to accept student patients since 11/5/1947. Treatment fees are debited to the School Hygiene account.

### IV. — *Summer Camps :*

Summer camps were arranged in Alexandria for the children of Marg and Helwan Preventoria to benefit by aerotherapy and heliotherapy, thus increasing their resistance in general and against T.B. in particular. Children were sent in groups of 30 each. The first group was sent on 10/7/1947 and returned on 1/8/1947; the second group went on 31/7/1947 and returned on 15/8/1947. Children were accommodated at the Marine Sanatorium at San Stefano. These camps were supervised by the Social Service specialist of Marg Colony.

### V. — *Settlement for Convalescents at Marg, Cairo :*

A full account was given in previous reports about such Institutions, their objectives, mode of organization, and the work of the various workshops therein.

The following is a detailed account of the various aspects of the work undertaken in Marg Settlement, including social, preventive and occupational activities.

The Settlement consists of 125 cottages. At the end of 1947, 70 convalescents were in residence with their families at the Settlement. Every family is accommodated in one of the cottages, which usually consists of 3 to 4 rooms. The total number of residents amounted to 363 including the staff.

As a rule, convalescents are engaged each in his original occupation. Those without occupations are studied from the social and physical aspects and then given the choice of a suitable occupation.

#### *Workshops in Operation :*

Several workshops are in operation within the Settlement, namely:

(a) Tailoring and is manned by 18 convalescents and 3 boys from the preventorium.

(b) Shoemaking and is manned by 17 convalescents and 4 boys.

(c) Carpentry for making furniture, e.g. desks, cupboards, benches, etc. and is manned by 7 convalescents and one boy.

(d) Tinsmithy for making spittoons, tin boxes, meat safes, etc. and is manned by 8 convalescents and one boy.

(e) Broom and basket making: Leaves and fibres from palm trees growing in the Settlement were used in training convalescents in broom and basket making. This workshop is manned by 2 convalescents and a boy.

#### *Agricultural work :*

Five Convalescents look after the garden and trees growing in the Settlement and train boys in horticulture.

#### *Working hours :*

The convalescent works for a limited number of hours daily. These are determined by the medical officer with due regard to his state of health. On no account do working hours exceed 6 daily, but may be as few as two or even one hour a day.

Working hours in the shops are generally from 8-12 a.m. and from 2-4 p.m.

#### *Wages :*

Convalescents engaged in workshops receive enough wages to maintain their families, besides free lodging. The minimum daily wage is 120 mills. besides social allowance for married convalescents and skilled workers. A new scale of wages has been adopted providing annual rises for industrious workers with good behaviour.

#### *Progress of Workshops :*

The Settlement workshops satisfactorily executed all the orders placed by the Chest Diseases Section for clothes, shoes, carpentry, and tinsmithing. On the other hand, the workshops made such progress that they were able to compete in general adjudications for articles required by the Central Stores. Many of the articles made by the workshops are now on view in various units of the Ministry.

The following is a brief statement of the cost of works executed by each workshop:

Tailoring workshop	...	...	...	...	L.E	929.810
Carpentry workshop	...	...	...	...	L.E	820.150
Shoemaking workshop	...	...	...	...	L.E	194.200
Tinsmithing workshop	...	...	...	...	L.E	206.250
TOTAL...						L.E 2151.710

An arrangement was made whereby children of convalescents over 10 years old were sent to various workshops to learn suitable occupations and earn wages.

### *Medical Care :*

A periodic medical examination of convalescents is done by the medical officer of the Settlement so that each is examined once a month. Where necessary, A.P. treatment is maintained. In the case of relapses, convalescents are immediately removed to the Sanatorium but the family remains in the Settlement. Half the daily wage is paid to the family during the time the convalescent remains in sanatorium.

Family members of convalescents are periodically examined, given prophylactic vaccines against various infectious diseases and treated free of charge. Confinements are attended by a midwife from the Preventorium who pays the Settlement weekly visits.

### *Social work :*

A social service has been set up in the Settlement to organise the leisure time of residents and help them make the best use of it.

### *Cooperative Society :*

A cooperative Society was initiated by the Anti-tuberculosis Association who provided a sum of L.E. 150 on loan without interest. A social expert organised the Society on a sound economical basis with the object that all the assets of the society will ultimately revert to convalescents. Convalescents, on the other hand, pay a monthly subscription each which is added to the capital.

The society has rendered valuable services to convalescents, having supplied them with all their domestic requirements and thus saved them the trouble of going to Cairo or neighbouring villages to buy them.

The society met with great success. At the end of the year it was possible to refund the L.E. 150 loan to the Anti-tuberculosis Association and at the same time realise a profit of L.E. 150.908 mills. By adding the total subscriptions of convalescents amounting to L.E. 54.120, the capital rose at the end of 1947 to L.E. 206.018 mills.

It is anticipated that the society will continue to make gradual and steady progress until it is in a position to become a member of the Cooperative Department of the Ministry of Social Affairs.

### *Raising the Economic Standard :*

The social service was instrumental in raising the economical standard of convalescents. Work has been provided for children of convalescents whether in the workshops within the Settlement or in private workshops in the neighbourhood.

Carpet making and poultry breeding will be introduced for the benefit of convalescents' wives.

### *Financial Aid :*

Monetary contributions are made to needy convalescents on occasions of confinement, death or social events. A total sum of L.E. 50 was contributed this year out of the cooperative society profits. The following are the details :

L.E. 14.500 on the occasion of confinements.

L.E. 5.000 on the occasion of death.

L.E. 30.500 on the occasion of social events for the welfare of residents.

L.E. 50.000

### *The Club :*

A club was provided in the Settlement for the entertainment and amusement of convalescents and where they can participate in light games which suit their physical conditions, e.g. trick-track, chess, dominoes and draughts. Besides, the club encourages residents to remain in the Settlement and not proceed to nearby towns to spend their leisure time in cafés and other places of amusements which may have serious repercussions on their health. It is worthy of mention that most of the sports appliances are made by the convalescents themselves at the various workshops. The club is equipped with a radio which is connected to loudspeakers throughout the Settlement for the amusement of convalescents and their families.

### *The Canteen :*

The club is provided with a canteen where residents may obtain refreshments and light meals at moderate prices. The canteen is under the medical supervision of the officer of the Settlement.

### *Educational Activities :*

These include a library, a cinema, theatrical performances, night classes and religious meetings.

### *The Library :*

A room was annexed to the club and used as a library. It contains a good collection of books and magazines dealing in religion, literature, social services etc. Many of these have been contributed by the authors.

### *Cinema and Theatrical Performances :*

Through the courtesy of the Health Propaganda Section, the Misr and other studios, health, social and cultural films are shown to convalescents twice a month. Convalescents with a tendency for acting have formed a company to organize concerts for the entertainment of residents.

### *Anti-illiteracy Work :*

Three evening classes to teach convalescents and their families reading and writing were organized with a view to combating illiteracy among residents. Teaching is undertaken by either the staff or by educated convalescents. The work is under the supervision of the Ministry of Education. Arrangements are being made for the education of convalescents' wives as well. It is hoped that within a year, there will remain no illiterate convalescent and this Settlement or village will become a model for combating illiteracy to be copied by other villages.

### *Religion :*

Due attention was paid to religion. A student from El Azhar has been appointed to the mosque of the Settlement and sermons are delivered weekly and on special occasions and feasts.

### *Meetings :*

Cultural meetings are held in the hall of the Settlement where instructive lectures are delivered under the supervision of the social worker.

### *An attempt towards forming a self-contained Community :*

It was observed that convalescents had a tendency to lead an independent and self-supporting life. Seven convalescents were, therefore, elected from amongst residents to form a board of directors for the management of the cooperative society, the club and other activities.

### *Children of Convalescents :*

Special interest was taken in children of convalescents whether living with them or accommodated in the Preventorium. Besides morning studies, they are sent to the various workshops to learn suitable occupations. Children in residence at the Preventorium are permitted to spend the night in the Settlement to enjoy the company of their parents.

### *Tuberculin Surveys :*

A large scale tuberculin survey was carried out by unit Medical Officers throughout the Country on various categories of the population. Of a total of 52,875 persons surveyed between 1937 and 1947, 38,497 cases gave positive tuberculin test (Montoux) or a ratio of 73.8 %. Details of these are given in Table No. 60.

TABLE No. 60.—RESULTS OF TUBERCULIN SURVEY CARRIED OUT DURING THE YEAR

	Age Groups												Adults		
	Children						Over 15 years								
	From 1 to 15 years			From 10 to 15 years			From 5 to 10 years			Under 5 years					
	Total	Positive	%	Total	Positive	%	Total	Positive	%	Total	Positive	%			
Males ... ..	24,238	16,944	69·6	7,532	5,873	78	9,635	5,954	61·8	7,071	5,117	72·4	6,190	5,117	82·7
Females ... ..	17,862	12,246	68·5	5,044	4,044	67·9	7,118	4,607	64·7	4,791	3,595	75	4,585	4,190	91
TOTAL ... ..	42,100	29,190	69·3	13,485	9,917	73·5	16,753	10,561	63	11,862	8,712	73·4	10,775	9,307	86·4



TABLE NO. 62.—STATISTICS OF PATIENTS IN SANATORIA AND IN-SECTIONS OF DISPENSARIES  
(DAMIETTA, PORT-SAID, SHERBIN, MANSOURA, ZAGAZIG, TANTA, DAMANHOUR, FAYOUM, MINIA,  
ASSIUT, SOUHAG AND ASWAN) AND THE RESULT OF TREATMENT IN THE YEAR 1947.

				Almaza Sanat.	Abbassia Sanat.	Giza Sanat.	Alex. Sanat.	In-pat. sections in disp,
Before Admission	No. of patients discharged ... ..			1,458	1,065	418	368	974
	Sputum ... ..	{ positive ... ..		884	776	269	187	693
		{ negative ... ..		274	289	—	—	—
	Lesion... ..	{ unilateral ... ..		695	417	281	206	684
		{ bilateral ... ..		763	648	137	62	290
		{ cavitary ... ..		332	596	121	133	579
	Temperature ... ..	{ normal ... ..		876	478	268	126	631
		{ abnormal ... ..		582	587	150	242	343
	General Treatment ... ..			3,496	1,065	244	368	775
	Exercise Treatment ... ..			830	273	174	186	368
Treatment given	Gold therapy {	No. of patients ... ..		5	51	—	—	12
		No. of injections ... ..		47	513	—	—	198
	Tuber- culin inject. {	No. of patients ... ..		—	—	—	—	—
		No. of injections ... ..		—	—	—	—	—
	A.P. {	Inductions ... ..		226	360	139	148	443
		Refills ... ..		6,370	6,885	2,501	1,976	7,422
	Extrapleural A.P. ... ..			1	—	—	—	—
	Phrenic crush ... ..			295	172	—	—	—
	Pleuratomy ... ..			13	—	—	—	—
	Aspiration ... ..			54	15	43	26	129
Cause of discharge	Thoracoplasty ... ..			28	40	—	—	—
	Adhesiectomy ... ..			383	152	—	—	—
	Complications ... ..			—	312	—	56	63
	No. of other injections given ... ..			833	7,199	1,309	125	3,854
	Patients went on leave and did not return ... ..			34	17	—	8	38
	At request {	refused treatment ... ..		381	188	—	25	175
		Pts. having special difficulties ... ..		72	519	231	154	185
	With agreement of physician ... ..			971	341	97	181	576
	Weight. {	increase of weight ... ..		918	519	223	211	942
		decrease of weight ... ..		368	236	65	51	165
Stationary ... ..		172	310	130	106	167		
Condition on Discharge	Temperature {	Normal ... ..		1,135	718	338	274	723
		Abnormal ... ..		323	347	80	94	251
	Sputum {	still positive ... ..		705	399	269	161	513
		,, negative ... ..		296	198	97	143	182
		became negative ... ..		314	307	45	38	259
	Successful A.P. continued ... ..	,, positive ... ..		143	161	7	26	20
		A.P. failed ... ..		226	509	—	109	335
	A.P. failed ... ..			104	78	—	39	177
	Condition improved ... ..			837	528	223	211	590
	,, worse ... ..			97	101	31	40	117
,, stationary ... ..			403	365	124	106	236	
Died ... ..			121	71	40	11	31	
Ability to work {	working {	fully ... ..	26	28	21	5	84	
		partially ... ..	639	245	153	211	435	
	incapable ... ..		672	721	204	141	424	
Average duration of stay in days ... ..			126	181	108	102	1,123	
Pts. stayed 6 mont's or more ... ..			542	319	112	68	234	
,, less than 6 months ... ..			916	746	306	300	740	

TABLE No. 63.—No. OF T.B. POSITIVE CASES NOTIFIED BY THE DISPENSARIES DURING THE YEAR 1947 ACCORDING TO RESIDENCE

Dispensaries	Cairo	Alex.	Damietta	Port-Said	Canal-Suez & Ismailia	Behera	Gharbia	Menoufia	Dakahlia	Sharkia	Kalutubia	Giza	Bent-Suef	Fayoum	Minia	Assut	Gerga	Qena	Aswan	Oases	TOTAL
Boulaq ...	591	5	1	1	12	—	9	10	3	7	62	24	2	—	—	1	6	—	8	—	748
Mobtadayan ...	555	15	—	—	6	—	13	6	9	28	14	359	1	—	—	3	—	—	—	—	1,014
Khalifa ...	684	—	—	—	4	3	1	9	4	2	16	8	4	—	—	4	—	—	—	—	747
Mansoura ...	—	—	1	—	—	—	122	—	319	9	—	1	—	—	—	—	—	—	—	—	452
Zagazig ...	—	—	—	—	24	—	2	—	32	232	12	2	—	—	—	—	—	—	—	—	304
Damietta ...	—	—	133	4	—	—	77	—	243	—	—	—	—	—	—	—	—	—	—	—	457
Port-Said ...	1	—	—	336	20	1	—	—	—	2	—	—	—	—	—	—	1	—	—	—	361
Tanta ...	—	—	—	—	—	8	263	29	20	—	—	—	—	—	—	—	—	—	—	—	320
Mehalla el Kobra ...	—	—	—	—	—	1	284	—	7	—	—	—	—	—	—	—	—	—	—	—	216
Shebin el Kom ...	—	—	—	—	—	—	—	193	—	—	23	—	—	—	—	—	—	—	—	—	851
Alexandria ...	—	775	—	—	—	67	9	—	—	1	—	—	—	—	—	—	—	—	—	—	321
Damanhour ...	—	3	—	—	—	277	80	—	77	—	—	—	—	—	—	—	—	—	—	—	310
Sherbin ...	—	—	—	—	—	—	133	—	—	—	—	—	80	—	—	—	—	—	—	—	192
Fayoum ...	—	—	—	—	—	—	—	—	—	—	—	—	—	222	197	31	—	—	—	—	228
Minia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	182	—	—	—	—	195
Assut ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100	—	—	—	110
Soubag ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	170	3	—	773
Qena ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	115	—	115
Aswan ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	1,832	798	135	341	66	357	993	247	714	281	127	394	87	223	205	220	116	184	126	—	7,446

TABLE NO. 64.—CASES REPORTED DEAD TO DISPENSARIES DURING THE YEAR 1947  
ACCORDING TO AGES

Dispensaries	1—5 Years	5—15 Years	15—25 Years	25—35 Years	35—45 Years	Above 45 Years	TOTAL
Boulaq ... ..	26	36	61	46	19	16	204
Mobtadayan ... ..	10	25	137	58	24	17	271
Khalifa ... ..	3	89	100	133	103	52	480
Damanhour ... ..	—	—	4	12	13	5	34
Alexandria ... ..	3	18	20	35	25	16	117
Tanta ... ..	4	6	9	14	13	16	62
Mansoura ... ..	5	19	30	15	10	3	82
Shebin el-Kom ...	—	4	34	23	2	7	70
Mehalla el Kobra...	—	5	13	17	9	6	50
Zagazig ... ..	1	1	9	11	7	4	33
Damietta ... ..	2	13	19	17	7	1	59
Port-Said ... ..	1	6	18	9	12	2	48
Sherbin ... ..	—	2	2	12	6	1	23
Fayoum ... ..	—	4	23	30	10	4	71
Minia ... ..	1	4	8	16	8	5	42
Assiut ... ..	—	1	14	9	5	4	33
Souhag ... ..	—	4	7	8	3	1	23
Qena ... ..	—	1	3	8	5	4	21
Aswan ... ..	—	2	5	3	3	3	16
<b>TOTAL ...</b>	<b>56</b>	<b>240</b>	<b>516</b>	<b>476</b>	<b>284</b>	<b>167</b>	<b>1,739</b>

TABLE No. 65.—NUMBER OF CHEST DISEASES UNITS SINCE 1929.

Year	Chest Dis. Dispensaries			Chest sanatoria	T.B. Bone Sanatoria	Preventoria	T. B. convalescent colonies
	Dispen.	Branches	In-Patient sections				
1929... ..	2	—	—	—	—	—	—
1930... ..	3	—	—	—	—	—	—
1931... ..	3	—	—	—	—	—	—
1932... ..	3	—	—	—	—	—	—
1933... ..	4	—	—	—	—	—	—
1934... ..	4	—	—	1 <sup>(1)</sup>	—	—	—
1935... ..	5	—	—	1	—	—	—
1936... ..	6	—	—	1	1	—	—
1937... ..	8	—	—	1	1	—	—
1938... ..	12	—	2	2	1	1	—
1939... ..	13	—	2	2	1	1	—
1940... ..	14	—	4	2	1	4	—
1941... ..	14	1	4	2	1	4	—
1942... ..	15	3	6	2	2	4	—
1943... ..	15	3	6	2	2	4	1
1944... ..	16	4	8	3	2	4	1
1945... ..	17	4	10	3	2	4	1
1946... ..	19	12	12	4	2	4	1
1947... ..	19	14	12	5	2	4	1

N.B.—<sup>(1)</sup> Fouad Sanatorium, Helwan, had been attached to this Section in September 1934.

<sup>(2)</sup> Maritime Sanatorium, Alexandria, had been attached to the Section in September 1936.

TABLE No. 66.—ANNUAL RETURN OF CASES ADMITTED TO MARG CONVALESCENT COLONY DURING THE YEAR 1947

Months	No. of new convalescents	Ages of convalescents					Occupation of convalescents						Convalescents still under Treat.	Relationship to contacts							Occasional Diseases	Discharged		Referred to Sanat.		Remarks
		Below Yrs.	20—29 Yrs.	30—39 Yrs.	40—49 Yrs.	Above 50 Yrs.	Carpenter	Tailor	Tinsmith	Shoemaker	Peasant	Other occupations		Father	Mother	Wife	Son	Brother	Sister	Other Relatives		Convales.	Contacts	Convales.	Contacts	
January ... ..	2	—	1	1	—	—	—	—	1	—	1	—	—	—	2	—	—	1	—	—	—	—	—			
February ... ..	1	—	—	1	—	—	—	—	—	—	1	—	—	—	1	5	—	—	1	—	—	1	—			
March ... ..	2	—	2	—	—	—	—	—	2	—	—	—	—	—	1	1	3	—	—	—	—	—	—			
April ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—			
May ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
June ... ..	1	—	1	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	6	—			
July ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
August ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
September ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—			
October ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—			
November ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	7	1	—			
December ... ..	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	—			
TOTAL ... ..	7	—	5	2	—	—	—	—	—	—	2	—	—	—	—	8	3	1	—	—	4	7	15	—		

No.	of	Convalescents	on 1st January 1947	...	...	...	66
"	"	"	admitted during the year	...	...	...	7
"	"	"	discharged "	"	...	...	4
"	"	"	on 31st Dec. 1947	...	...	...	69

<i>N.B:</i>	Zeitoun	Marg	Alexandria	Assiut
Number of Children on 1st. January 1947 ... ..	84	43	31	32
" " " admitted during the year ...	56	19	39	34
" " " discharged " " " ...	73	30	32	44
" " " on Dec. 31, 1947... ..	67	32	38	22

TABLE NO. 68 — ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME SANATORIUM

## OUT-PATIENT SECTION

<i>N.B.</i>	Alexandria Sanat.	Helwan Hosp.
Number of patients On 1st. Jan. 1947 ... ..	71	131
"    "    " Admitted during the year ...	125	200
"    "    " Discharged " " " ...	124	205
"    "    " On Dec. 31, 1947 ... ..	72	126

TTED

AGES																						No. of New Children
han rs.	9-10 Yrs.		8-9 Yrs.		7-8 Yrs.		6-7 Yrs.		5-6 Yrs.		4-5 Yrs.		3-4 Yrs.		2-3 Yrs.		1-2 Yrs.		Less than 1 Yr.			
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.		
—	2	—	2	1	3	3	1	2	4	1	4	2	—	1	4	1	4	6	3	11	56	
1	—	4	3	3	1	4	—	2	—	1	—	—	—	—	—	—	—	—	—	—	19	
3	2	4	1	4	4	1	2	2	2	2	1	1	2	—	—	1	—	2	1	3	39	
—	1	—	4	1	3	2	1	2	1	2	1	1	—	2	2	—	1	—	3	7	34	
4	5	8	10	9	11	10	4	8	7	6	6	4	2	3	6	2	5	8	7	21	148	

PRINCESS KHADIGA ABBAS HALIM HOSPITAL FOR BONE DISEASES AT HELWAN DURING THE YEAR 1947

IN PATIENT SECTION

New Patients											Discharged											Unit
Ages						T.B. Spine	T.B. Knee	T.B. Hip	T.B. Bones & Joints	Other Diseases	No of Pat. Discharged	Result					Treat. By Ultra Violet	Major Operations	Minor Operations	Plaster	X. Ray	
Under 5 Years		5-10 Yrs.		above 10 Yrs.								Died	Cured	Stationary	Improved	Discharg. in Plaster						
M.	F.	M.	F.	M.	F.																	
9	12	14	10	47	33	55	14	32	23	1	124	5	12	19	47	41	44	15	—	125	144	Alex. Sanat.
17	11	29	14	75	54	66	13	16	47	58	205	16	86	44	51	8	165	15	17	131	867	Helwan Hosp.
26	23	43	24	122	87	121	27	48	70	59	329	21	98	63	98	49	209	30	17	259	1011	TOTAL

TABLE No. 69—ANNUAL RETURN OF CHEST DISEASE

Dispensary	New Cases Seeking Treatment (Dispensary)	(New T.B. Cases in the Dispensary) or (New Patients Admitted)																					
		T. B. Cases			Other Chest Diseases	Age Groups																Profession	
		TOTAL	SPUTUM	X. RAY		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years		Vendors	Officials		
						M	F	M	F	M	F	M	F	M	F	M	F	M	F				
Boulaq ... ..	7753	748	604	144	6204	6	14	53	41	212	93	147	55	63	30	23	5	4	2	38	60		
Mobtadayan... ..	10251	1014	604	410	9235	28	23	88	74	221	88	195	80	105	37	30	16	19	10	71	99		
Khalifa... ..	8496	747	522	225	7749	12	3	87	40	212	102	104	61	59	30	13	12	8	4	121	96		
Damanhour ... ..	6013	361	320	41	5652	6	1	45	21	93	35	75	24	34	5	10	6	5	1	17	26		
Alexandria ... ..	11196	851	552	299	10345	35	15	88	59	246	81	126	42	73	12	36	12	22	4	42	56		
Tanta ... ..	13244	320	204	116	12924	3	3	29	18	58	31	72	36	32	16	10	10	2	—	12	29		
Mansoura ... ..	8663	452	293	159	8211	12	4	51	29	93	30	91	56	50	13	11	9	3	—	22	19		
Shebin el Kom ...	8393	216	103	113	8177	3	5	17	8	63	28	39	25	11	7	5	2	2	1	9	15		
Mehalla el Kobra	9948	292	207	85	9656	2	3	17	16	61	19	66	37	34	13	11	9	4	—	5	18		
Zagazig... ..	11451	304	241	63	11147	2	3	17	20	71	21	67	30	34	14	12	5	7	1	10	4		
Damietta ... ..	9541	457	300	157	9084	16	5	39	37	117	67	64	45	28	10	11	4	14	—	24	22		
Port Said ... ..	6746	361	281	80	6385	13	14	41	31	71	42	39	27	36	15	18	7	6	1	46	29		
Sherbin... ..	5709	210	177	33	5499	7	5	14	7	48	22	45	11	30	6	12	—	1	—	10	7		
Fayoum ... ..	6670	302	272	30	6298	1	1	23	16	90	29	60	27	27	13	9	3	3	—	9	20		
Minia ... ..	3812	228	71	157	3584	3	3	10	13	31	18	44	35	26	17	10	10	4	4	5	10		
Assiut ... ..	4320	195	140	55	4125	5	8	12	9	47	28	32	16	17	10	4	6	1	—	3	24		
Souhag ... ..	4199	100	74	26	4056	5	4	9	5	15	18	10	10	8	8	5	2	1	—	3	4		
Qena ... ..	3861	173	107	66	3688	1	1	11	7	38	15	41	13	17	9	7	6	5	2	7	18		
Aswan ... ..	1594	115	43	72	1479	3	1	16	7	20	7	27	12	12	4	4	1	1	—	2	6		
TOTAL ... ..	135960	7446	5115	2331	122798	163	116	667	458	1807	774	1344	642	696	269	241	125	112	32	456	562		

Dispensary				Exam. of (Sanat)				Old Cases (Disp.)					Visits (Disp.)		Discharge				
	Old Patients			Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary
	Pos.	Under Observ.																	
No.	No.	Pos.														Pos.	Neg.		
Boulaq ... ..	191	1	—	—	—	—	—	8695	5911	694	732	1358	4095	398	455	235	220	235	63
Mobtadayan ...	34	2	—	—	—	—	—	12141	8345	1107	919	1770	2713	391	467	230	237	268	102
Khalifa ... ..	3	203	—	—	—	—	—	8204	5731	1224	1026	223	1430	359	470	222	254	175	126
Damanhour ...	151	3	—	—	—	—	—	5637	2557	110	146	2824	1192	472	85	65	20	59	20
Alexandria ...	18	—	—	—	—	—	—	23408	17446	3892	710	1360	2107	363	288	129	159	171	92
Tanta ... ..	37	1	1	—	—	—	—	14928	5920	1185	799	7024	1347	366	123	66	56	78	29
Mansoura ... ..	155	2	—	—	—	—	—	4347	4134	134	60	19	1675	346	105	53	52	57	29
Shebin el Kom ...	26	1	—	—	—	—	—	6922	3161	647	184	2930	756	362	73	27	39	32	25
Meballa el Kobra...	39	12	4	—	—	—	—	6465	3829	351	256	2029	1804	597	85	41	44	34	31
Zagazig ... ..	77	5	—	—	—	—	—	13594	7683	1418	834	3659	1222	210	142	92	50	63	48
Damietta ... ..	503	6	1	512	—	—	—	9540	7355	223	141	1821	2930	681	322	163	159	268	28
Port Said ... ..	125	44	8	—	—	—	—	9390	2346	549	492	6003	1431	605	63	48	15	31	29
Sherbin ... ..	59	—	—	—	—	—	—	2194	762	99	121	1212	797	334	79	50	29	48	28
Fayoum ... ..	60	11	1	—	—	—	—	5843	2867	370	384	2222	2225	646	67	36	31	48	9
Minia ... ..	59	21	12	—	—	—	—	8988	2626	1112	456	4794	1844	360	58	36	22	33	14
Assiut ... ..	111	39	3	—	—	—	—	2313	1382	480	262	189	1441	597	121	74	47	72	25
Souhag ... ..	14	4	—	—	—	—	—	3680	606	182	69	2823	313	77	63	37	26	34	19
Qena ... ..	25	8	—	—	—	—	—	3676	1181	159	122	2214	807	420	24	15	9	10	6
Aswan ... ..	48	2	—	—	—	—	—	2111	513	151	41	1406	1025	294	47	14	33	24	16
TOTAL ... ..	1735	365	30	512	—	—	—	152076	84355	14087	7754	45880	31154	4578	3143	1633	1502	1740	739

Sanatorium,)								New Contacts, (Disp.)			Cases under Observation (Disp.)	Haemoptysis	Sputum Examination				X-Ray Examination			
Students	No Occupation	Disp.		Classes (Sanat.)				Children	Adults	T.B. Contacts			Total of Sputum	Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases	
		Cases Recorded for San.	Cases Admitted To Sana.	Ist.	2nd.	3rd Paying	3rd Gratis							No.	Pos.	No.	Pos.		No.	Pos.
19	231	552	448	—	—	—	—	285	336	73	457	2	1690	1363	604	327	75	1190	998	370
35	378	607	320	—	—	—	—	416	597	33	237	17	2070	1776	604	294	54	2077	2041	552
56	245	465	388	—	—	—	—	391	353	—	—	—	1732	1247	522	485	156	982	776	631
3	110	189	76	—	—	—	82	131	107	11	105	10	762	477	320	285	218	631	477	350
13	313	408	290	—	—	—	—	380	503	18	136	2	3090	1406	552	1684	382	668	650	404
9	121	162	124	—	—	—	62	170	190	7	70	25	779	540	204	239	108	383	345	229
16	163	393	271	—	—	—	60	81	217	20	15	19	1063	623	293	440	247	252	95	3
5	88	87	48	—	—	—	—	64	83	3	20	—	382	294	103	88	23	138	111	94
5	95	130	114	—	—	—	—	77	92	6	91	—	520	346	207	174	60	352	301	211
3	99	174	146	—	—	—	70	91	199	13	83	10	889	607	241	282	106	334	252	148
4	195	473	153	—	—	—	217	137	153	10	264	—	1399	991	300	408	189	1113	604	275
7	129	152	68	—	—	—	38	238	323	13	76	7	667	341	281	326	273	478	309	305
1	73	131	102	—	—	—	79	59	92	20	50	22	665	493	177	172	95	189	130	93
4	91	68	68	—	—	—	68	83	159	7	96	19	861	529	272	332	133	138	67	54
8	104	76	61	—	—	—	61	46	88	—	55	—	662	231	71	431	136	158	78	79
7	47	122	121	—	—	—	121	86	74	1	—	22	1121	437	140	684	339	413	263	151
—	49	—	73	—	—	—	73	10	11	1	22	—	742	559	74	183	84	58	40	23
4	29	65	24	—	—	—	—	42	96	—	—	—	306	253	107	53	21	202	169	146
3	62	59	55	—	—	—	55	5	8	—	3	—	203	67	43	136	43	100	50	49
202	2622	4413	2950	—	—	—	986	2792	3673	236	1780	155	19603	12580	5115	7023	2734	9856	7756	4199

Ability of Work			Treatment					Operation													No. of Deaths
Complete	Partial	Unable	Tuberculin	Gold	Other Injections	Exercise Treatment	General Treatment	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage or Oleothorax	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Bronchoscopy or Bronchography	Refused admission to Sanatorium	
									Induction	Refills			Induction	Refills							
3	275	139	—	—	—	—	—	—	—	1275	—	—	—	—	—	—	—	—	—	—	204
3	266	154	—	—	—	—	—	21	2	2521	—	—	—	—	—	—	—	—	—	—	271
86	194	151	—	—	—	—	—	3	—	2259	—	—	—	—	—	—	—	—	—	—	480
—	42	42	—	—	—	42	85	—	69	2710	—	—	—	—	23	—	—	—	—	—	34
24	104	156	—	—	—	—	—	6	5	1961	—	—	—	—	—	—	—	—	—	27	117
8	39	70	—	—	—	—	—	2	36	1979	—	—	—	—	—	—	—	—	—	—	62
4	39	58	—	—	66	—	—	4	14	1596	—	—	—	—	—	—	—	—	—	—	82
3	28	35	—	—	48	—	—	6	4	605	—	—	—	3	—	—	—	—	—	—	70
5	43	32	—	—	115	—	—	1	1	784	—	—	—	—	2	—	—	—	—	—	50
—	53	85	—	—	—	—	—	10	31	2230	—	—	—	—	—	—	—	—	—	—	33
1	145	171	—	—	356	159	217	55	159	4656	—	—	—	—	—	—	—	—	92	—	59
3	48	12	—	—	—	—	—	17	36	795	—	4	—	—	—	—	—	—	—	—	48
2	23	54	32	—	185	—	—	19	31	653	—	—	—	—	—	—	—	2	—	16	23
—	46	19	—	66	281	—	—	30	28	1277	—	—	—	—	—	—	—	—	—	8	71
—	19	36	—	—	—	—	—	18	24	535	—	—	—	—	—	—	—	—	—	—	42
1	54	61	—	—	—	—	—	36	25	565	—	—	—	—	—	—	—	—	—	—	33
7	22	30	—	—	—	—	—	16	15	356	—	—	—	—	7	—	—	—	—	3	23
—	12	11	—	—	—	—	—	—	3	260	—	—	—	—	—	—	—	—	—	—	21
1	26	17	—	—	—	—	—	24	18	325	—	—	—	—	6	—	—	—	—	1	16
151	1478	1333	32	66	1051	201	302	268	501	27610	—	4	—	3	38	—	—	2	—	147	1739

TABLE No. 70.—ANNUAL RETURN OF SANATORIA A

Dispensary	New Cases Seeking Treatment (Dispensary)	(New T.B. Cases in the Dispensary) or (New Patients admitted)																					
		T.B. Cases			Other Chest Diseases	Age Groups																Pr	
		Total	Sputum	X-Ray		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years					
						M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Vendors	Officials
Shobrakhit ...	652	21	20	1	631	1	—	3	1	4	2	4	2	2	—	1	1	—	—	—	—		
Mit Ghamr...	3451	34	23	11	3417	—	—	7	4	5	2	4	6	2	3	1	—	—	—	—	—		
Sinbellawein ...	961	12	9	3	949	—	—	—	2	4	—	—	2	2	1	1	—	—	—	—	—		
Menouf ...	1045	22	11	11	1023	—	1	1	—	6	3	3	4	1	2	—	—	—	1	1	1		
Benha ...	1462	20	14	6	1442	—	—	1	3	8	—	1	5	—	1	1	—	—	—	—	1		
Kafr El Sheikh...	1331	22	14	8	1309	—	—	2	2	5	1	5	3	1	—	2	1	—	—	—	2		
Faraskour ...	1526	13	7	6	1513	—	—	1	—	3	—	3	2	1	3	—	—	—	—	1	1		
Ismailia ...	109	15	14	1	94	—	—	2	1	2	4	1	2	2	—	1	—	—	—	—	—		
Dikernes ...	2751	30	26	4	2721	—	—	1	—	3	4	12	1	6	1	2	—	—	—	1	1		
Etsa ...	424	9	9	—	315	—	—	2	1	2	1	1	1	1	—	—	—	—	—	—	—		
Samallout ...	631	22	7	15	609	—	—	1	1	5	1	5	4	2	—	—	1	2	—	1	1		
Akhmim ...	57	—	—	—	57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Luxor ...	933	44	29	15	889	—	—	4	1	6	5	14	5	4	3	—	1	—	1	1	—		
Nag' Hammadi ...	852	5	2	3	847	—	—	1	—	2	—	—	—	1	—	1	—	—	—	—	2		
Fouad Sa. Almaza	1665	1665	945	720	—	—	—	298	15	835	17	332	10	118	4	27	1	8	—	131	224		
Abbasia Hospital	1005	972	774	198	33	18	74	19	242	61	348	25	128	7	53	5	19	—	6	4	17		
Giza Sanat. ...	494	487	337	150	7	9	—	105	—	224	—	110	—	32	—	9	—	5	—	41	50		
Alexandria Sanat	367	355	214	141	12	9	3	43	21	146	47	54	10	15	6	11	1	1	—	12	48		
Mehalla El Kobra	67	66	60	6	1	—	—	3	10	26	7	10	4	5	1	1	—	—	—	2	4		
TOTAL ...	3598	3545	2330	1215	53	36	77	468	288	1292	419	531	152	177	64	53	21	14	6	190	343		

Branches				Exam of (Sanat.)				Old Cases (Disp.)					Visits (Disp.)		Dischar				
	Old Patients			Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary
	Pos.	Under Observ.														Pos.	Neg.		
		No.	No.																
No.	No.	Pos.																	
Shobrakhit...	—	—	—	—	—	—	—	774	42	1	—	731	—	—	—	—	—	—	—
Mit Ghamr...	1	—	—	—	—	—	—	2599	323	198	102	2036	12	—	—	—	—	—	—
Sinbellawein...	—	—	—	—	—	—	—	218	217	1	—	—	66	1	—	—	—	—	—
Menouf...	—	—	—	—	—	—	—	125	98	14	2	11	83	83	7	2	5	5	2
Benha...	—	—	—	—	—	—	—	169	151	17	—	1	29	29	7	2	3	1	3
Kafr El Sheikh...	—	—	—	—	—	—	—	498	203	6	8	281	104	104	—	—	—	—	—
Faraskour...	—	—	—	—	—	—	—	—	—	—	—	—	99	10	—	—	—	—	—
Dikernes...	1	1	—	—	—	—	—	566	167	16	47	336	55	96	1	1	—	1	—
Eisa...	1	—	—	—	—	—	—	299	42	2	—	255	308	308	—	—	—	—	—
Samallout...	—	—	—	—	—	—	—	631	22	7	15	1229	158	101	—	—	—	—	—
Akmim...	—	—	—	—	—	—	—	14	—	—	—	14	—	—	—	—	—	—	—
Luxor...	—	—	—	—	—	—	—	1030	363	46	14	607	123	127	4	2	2	2	1
Nag' Hammadi...	6	8	—	—	—	—	—	512	117	25	13	357	26	35	5	2	3	3	—
Ismailia...	—	—	—	—	—	—	—	109	30	5	—	74	—	—	—	—	—	—	—
Fouad Sanatorium																			
Almaza...	1404	—	—	913	310	391	319	—	—	—	—	—	—	—	1458	884	574	837	403
Abbas.Chest. Hos.	1092	21	1	561	496	496	496	—	—	—	—	—	—	—	1065	776	289	528	365
Giza Sanat,	238	14	4	248	361	361	361	—	—	—	—	—	—	—	418	269	149	223	124
Alexandria Sanat	167	9	—	—	—	—	—	—	—	—	—	—	—	—	373	192	181	212	106
Mehalla El Kobra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	1
TOTAL...	2901	44	5	1722	1167	1248	1176	—	—	—	—	—	—	—	3315	212	1193	1800	999

	Almaza Sanat.	Abbassia Hosp.	Giza Sanat.	Alexandria Sanat.	Mehalla El Kobra Sanat.	Damanhur	Tanta	Mansour
No. of Patients on 1st Jan. 1947 ...	501	456	137	115	—	17	18	—
No. of Patients Admitted during the year	1665	1005	494	367	67	82	62	—
No. of Patients discharged during the year	1458	1065	481	373	1	81	66	—
No. of Patients on December 31, 1947...	708	396	150	109	66	18	14	—
Average stay ...	126	196	103	102	—	78	93	—



# Chapter IX - VENEREAL AND SKIN DISEASES

TABLE NO. 71.—CASES REMAINING UNDER TREATMENT IN VENEREAL DISEASES HOSPITALS  
ON JANUARY 1, 1947

Hospital	Syphilis	Gonorrhoea	Chancroid	Syphilis and Gonorrhoea	Syphilis and Gonorrhoea and Chancroid	Syphilis and Gonorrhoea and Skin	Syphilis and Chancroid.	Syphilis and Skin Dis.	Gonorrhoea and Chancroid	Gonorrhoea and Skin Dis.	Gonorrhoea and Chancroid and Skin Dis.	TOTAL
Hod El Marsoud ...	2	6	1	47	8	2	1	—	—	—	—	77
Gabbari ...	6	9	—	9	4	—	14	3	5	—	—	50
TOTAL ...	8	25	1	56	12	2	15	3	5	—	—	127

TABLE NO. 72.—NEW CASES ADMITTED TO VENEREAL DISEASES HOSPITALS DURING THE YEAR 1947

Hospital	Syphilis	Gonorrhoea	Syphilis and Gonorrhoea	Syphilis and Gonorrhoea and Chancroid	Syphilis and Gonorrhoea and Skin Dis	Syphilis and Chancroid	Syphilis and Skin Dis.	Gonorrhoea and Chancroid	Gonorrhoea and Skin Dis.	Gonorrhoea and Chancroid & Skin Dis	TOTAL
Hod El Marsoud ...	9	367	517	13	35	2	3	11	34	1	992
Gabbari ... ..	238	350	213	38	—	303	102	306	—	—	1,550
TOTAL ... ..	247	717	730	51	35	305	105	317	34	1	2,542

TABLE NO. 73.—SHOWING ORIGINAL LOCALITIES OF PATIENTS ADMITTED TO V.D. HOSPITALS  
DURING 1947

Locality	Patients	Hospital		Locality	Patients	Hospital	
		Hod El Marsoud	Gabbari			Hod El Marsoud	Gabbari
Cairo ... ..	{P.... ... A.W. ...	118 226	— —	<i>Brought Forward</i> ...		670	1,550
Alexandria ... ..	{P.... ... A.W. ...	— —	265 1,210				
Port-Said ... ..	{P. ... A.W. ..	61 17	— —	Ashmoun ... ..	{P.... A.W. ...	— 5	— —
Ismailia ... ..	{P.... ... A.W. ...	58 109	— —	Mansoura .. ...	{P. ... A.W. ...	108 66	— —
Suez ... ..	{P.... ... A.W. ...	5 26	— —	Zagazig ... ..	{P.... ... A.W. ...	1 14	— —
Quesna ... ..	{P. ... A.W. ..	— 2	— —	Abu Hammad ...	{P. ... A.W. ...	— 44	— —
Tanta ... ..	{P..... A.W. ...	26 21	— —	Fayoum ... ..	{P.... ... A.W. ...	51 25	— —
Kafr el Zayat ...	{P.... ... A.W. ...	— 1	— —	Beni Suef ... ..	{P.... ... A.W. ...	— 6	— —
Desouk ... ..	{P.... ... A.W. ...	— —	— 75	Samalout ... ..	{P.... ... A.W. ...	— 2	— —
<b>TOTAL</b> ... ..		<b>670</b>	<b>1,550</b>	<b>TOTAL</b> ... ..		<b>992</b>	<b>1,550</b>

P. = Patients      A. W. = Arrested women

TABLE NO. 74.—NUMBER OF PATIENTS TREATED IN V.D.  
HOSPITALS DURING 1947

Hospital	In-Patients	Out-Patients	No. of visits
Hod el Marsoud ...	1,069	1,728	6,462
Gabbari ... ..	1,600	99	872
<b>TOTAL</b> ... ..	<b>2,669</b>	<b>1,827</b>	<b>1,334</b>

TABLE NO. 75.—SHOWING DISTRIBUTION OF BEDS DURING 1947

Hospital	1st. Class	2nd. Class	3rd. Class Spec.	3rd. Class Ord.	Child-ren	Ophth. Branch	Total beds for patients	Beds for staff	Total No. of Beds.
Hod el Marsoud ...	—	—	14	227	—	—	241	10	251
Gabbari ... ..	—	—	5	165	—	—	170	9	179
<b>TOTAL</b> ... ..	—	—	<b>19</b>	<b>392</b>	—	—	<b>411</b>	<b>19</b>	<b>430</b>

TABLE No. 76.—SHOWING NEW CASES AND VISITS TO THE SKIN AND VENEREAL DISEASES CLINICS DURING 1947

Locality of Clinic	New Cases						Number of Visits					
	Syphilis			Gonorrhoea			Skin Diseases			Other V. Dis.		
	M		F	M		F	M		F	M		F
	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL
Sayed Zainab ... ..	473	265	738	741	807	1,548	1,700	4512	6,259	4	166	6,263
Shoubra ... ..	206	195	401	700	943	1,643	14,241	20,615	35,456	—	—	35,456
Gamalia ... ..	468	253	721	1,317	2,710	4,027	1,484	2,009	3,493	131	20	3,624
Abbassia ... ..	153	100	253	259	710	969	1,654	3,606	5,265	2	—	5,267
Old Cairo ... ..	61	34	95	61	214	275	476	1,069	1,344	—	—	1,344
Khalifa ... ..	81	91	172	80	621	701	1,151	5,393	6,094	1	—	6,095
Heliopolis ... ..	4	2	6	2	4	6	27	9	33	—	—	33
Port Said ... ..	88	96	184	180	665	845	1,862	2,467	4,322	3	—	4,325
Port Said Health Centre ...	49	97	146	30	229	259	1,732	2,159	3,891	—	—	3,891
Ismailia ... ..	103	175	278	83	635	718	1,037	1,183	2,220	3	—	2,223
Suez ... ..	59	74	133	195	1,199	1,394	2,274	2,823	4,217	10	3	4,220
Damietta ... ..	104	290	394	40	37	77	2,428	7,166	9,641	—	—	9,641
Benha ... ..	59	112	171	27	9	36	2,192	2,182	4,374	88	208	4,582
Shebin el Kom... ..	124	115	239	93	197	290	4,434	6,556	10,990	—	—	10,990
Menouf ... ..	81	60	141	29	132	161	4,074	3,950	8,024	—	—	8,024
Tanta ... ..	257	272	529	248	531	779	6,752	7,172	13,924	2	—	13,926
Mehalla el Kobra ... ..	144	94	238	40	103	143	3,400	2,185	5,585	2	—	5,587
W. el Zayat ... ..	51	49	100	23	31	54	1,158	1,247	2,405	—	—	2,405

Zagazig	...	...	...	...	...	147	149	40	8	4,468	3,614	20	—	4,681	3,767	522	867	80	17	639	563	18	—	1,259	1,447	
Facus	...	...	...	...	...	107	139	22	101	1,389	2,134	—	—	1,518	2,374	715	1,220	53	523	188	301	1	53	957	3,097	
Mansoura	...	...	...	...	...	220	246	163	906	4,210	5,320	71	—	4,664	6,472	4,460	7,452	538	2,508	333	697	43	—	5,374	10,657	
Mit Ghamr	...	...	...	...	...	86	95	18	14	4,443	5,204	—	—	4,547	5,313	1,515	3,759	54	58	1,650	1,921	—	—	3,219	5,738	
Damanhour	...	...	...	...	...	238	106	91	38	8,135	9,780	49	35	8,513	9,959	2,328	1,888	299	589	4,670	3,983	155	246	7,452	6,706	
Kafr el Dawar	...	...	...	...	...	58	67	41	20	1,708	1,679	3	—	1,810	1,766	1,296	1,488	39	16	485	315	1	—	1,821	1,819	
Giza	...	...	...	...	...	110	108	107	170	1,673	1,599	—	—	1,890	1,877	2,170	2,582	278	800	436	798	—	—	2,934	4,180	
Fayoum	...	...	...	...	...	233	268	175	167	1,846	2,515	—	—	2,254	2,950	5,053	8,901	701	1,567	744	1,159	—	—	6,498	11,627	
Sennuris	...	...	...	...	...	57	81	27	49	1,923	4,787	—	58	2,007	4,975	1,219	2,013	84	536	1,316	2,891	—	274	2,619	5,714	
Beni Suef	...	...	...	...	...	59	47	168	315	4,840	4,940	8	1	5,075	5,308	1,189	1,218	1,178	1,444	1,657	2,725	58	—	4,082	5,387	
Minia	...	...	...	...	...	114	109	104	542	2,722	3,996	29	—	2,969	4,647	5,676	5,533	681	501	1,174	1,595	25	—	7,556	7,629	
Assiut	...	...	...	...	...	209	262	71	23	2,599	3,473	—	—	2,879	758	6,071	9608	217	161	596	706	—	41	6,884	10,516	
Deirout	...	...	...	...	...	84	95	9	7	2,756	2,258	6	6	2,879	2,366	2,185	4,664	24	2	1,373	1,575	12	337	3,594	6,578	
Gerga	...	...	...	...	...	158	208	32	110	3,462	7,911	—	—	3,652	8,229	2,080	3,611	151	670	1,057	2,805	—	—	3,285	7,086	
Tahta	...	...	...	...	...	207	192	16	60	2,047	3,243	—	—	2,270	3,495	2,996	5,051	30	985	137	149	—	—	3,163	6,185	
Suhag	...	...	...	...	...	167	129	41	10	2,229	2,241	—	—	2,437	2,380	4,975	6,113	98	40	614	750	—	—	5,687	6,903	
Qena	...	...	...	...	...	129	206	27	2	1,508	3,128	1	1	1,665	3,337	2,823	5,430	110	216	628	907	1	1	3,562	6,554	
Nag' Hammadi	...	...	...	...	...	100	119	47	94	1,109	2,040	—	—	1,256	2,253	4,603	8,044	341	757	656	1,639	—	—	5,600	10,440	
Luxor	...	...	...	...	...	153	247	30	56	1,149	1,829	—	—	1,332	2,132	4,038	8,284	164	614	368	825	—	—	4,570	9,723	
Aswan	...	...	...	...	...	101	90	74	134	886	1,590	—	—	1,061	1,814	2,149	4,039	187	1,328	405	696	—	—	2,741	6,063	
TOTAL																							788	4,456	176,480	301,839

TABLE NO. 77.—GIVING DETAILS OF SYPHILIS CASES TREATED DURING THE YEAR 1947

Locality of Clinic	Primary		Second.		Tert.		Latent		Herd.		Nervous		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Sayed Zeinab ... ..	278	13	102	91	23	13	56	110	11	38	3	—	473	265
Shoubra ... ..	91	24	37	32	8	7	51	101	16	30	3	1	206	195
Gamalia ... ..	230	30	121	90	10	5	93	103	7	23	7	2	468	253
Abbassia ... ..	68	12	17	9	14	5	48	70	6	4	—	—	153	100
Old Cairo ... ..	30	6	11	6	3	2	15	19	2	1	—	—	61	34
Khalifa ... ..	30	7	17	14	13	3	16	48	5	19	—	—	81	91
Heliopolis ... ..	1	—	2	1	—	—	1	1	—	—	—	—	4	2
Port Said ... ..	4	—	49	17	6	11	19	56	7	10	3	2	88	96
Port Said Health Centre ...	3	1	9	5	2	—	27	71	8	17	—	3	49	97
Ismailia ... ..	13	2	26	11	16	3	42	147	5	12	1	—	103	175
Suez ... ..	19	4	20	11	5	2	9	52	6	5	—	—	59	74
Damietta ... ..	3	1	4	9	13	9	66	236	15	3	3	2	104	290
Benha ... ..	9	—	6	14	7	6	31	85	5	7	1	—	59	112
Shebin el Kom ... ..	33	11	34	31	8	1	37	52	12	20	—	—	124	115
Menouf ... ..	15	—	8	3	15	10	36	42	7	5	—	—	81	60
Tanta ... ..	66	17	49	20	53	23	55	174	34	38	—	—	257	272
Mehalla el Kobra ... ..	1	1	40	13	29	13	57	55	17	12	—	—	144	94
Kafr el Zayat ... ..	3	3	14	9	6	1	26	34	2	2	—	—	51	49
Zagazig ... ..	44	5	42	41	21	26	25	67	12	6	3	—	147	145
Faccus ... ..	10	3	19	13	—	—	44	87	30	36	4	—	107	139
Mansoura ... ..	30	4	42	20	24	28	85	164	37	30	2	—	220	246
Mit Ghamr ... ..	10	1	12	7	8	7	45	68	11	12	—	—	86	95
Damanhour ... ..	147	5	39	30	18	8	19	49	13	13	2	1	238	106
Kafr el Dawar ... ..	15	—	18	16	7	6	12	40	5	5	1	—	58	67
Giza ... ..	30	1	29	12	16	8	18	57	10	30	2	—	110	108
Fayoum ... ..	37	5	84	102	78	108	14	23	20	30	—	—	233	268
Sennuris ... ..	18	—	17	21	7	12	8	36	6	12	1	—	57	81
Beni Suef ... ..	13	—	19	24	1	6	18	10	8	7	—	—	59	47
Minia ... ..	33	2	36	25	5	8	30	54	9	20	1	—	114	109
Assiut ... ..	66	2	40	99	16	28	56	89	31	43	—	1	209	262
Deirout ... ..	4	1	31	15	10	6	24	62	15	11	—	—	84	95
Gerga ... ..	32	12	83	101	9	23	27	62	6	10	1	—	158	208
Tahta ... ..	17	—	46	18	18	12	84	121	40	40	2	1	207	192
Suhag ... ..	18	—	49	24	23	14	55	77	21	14	1	—	167	129
Qena ... ..	14	3	29	25	8	8	45	124	31	46	2	—	129	206
Nag' Hammadi ... ..	12	5	20	19	13	12	45	69	9	14	1	—	100	119
Luxor ... ..	24	2	20	24	15	28	53	148	40	45	1	—	153	247
Aswan ... ..	15	—	13	5	6	4	38	61	27	20	2	—	101	90
<b>TOTAL ... ..</b>	<b>1491</b>	<b>183</b>	<b>1254</b>	<b>1027</b>	<b>534</b>	<b>466</b>	<b>1430</b>	<b>2924</b>	<b>546</b>	<b>720</b>	<b>47</b>	<b>13</b>	<b>5302</b>	<b>5333</b>

TABLE No. 78.—GIVING DETAILS OF GONORRHOEA CASES TREATED DURING 1947

Locality of Clinic	Acute		Chronic		Urethritis	Second Inf.	TOTAL	
	M	F	M	F	M	F	M	F
Sayed Zeinab ... ..	581	642	160	165	—	—	741	807
Shoubra ... ..	547	384	153	559	—	—	700	943
Gamalia ... ..	1,003	1,084	110	302	204	1,324	1,317	2,710
Abbassia... ..	185	444	19	266	55	—	259	710
Old Cairo ... ..	46	93	15	14	—	107	61	214
Khalifa ... ..	62	348	18	196	—	77	80	621
Heliopolis ... ..	2	1	—	—	—	3	2	4
Port-Said ... ..	112	75	21	37	47	555	180	665
Port Said Health Centre	13	14	1	—	16	215	30	229
Ismailia ... ..	81	—	2	—	—	635	83	635
Suez ... ..	183	34	11	1	1	1,164	195	1,199
Damietta ... ..	16	5	24	24	—	8	40	37
Benha ... ..	26	9	1	—	—	—	27	9
Shebin el Kom ... ..	73	33	7	2	13	162	93	197
Menouf ... ..	25	7	4	1	—	124	29	132
Tanta ... ..	145	48	70	460	33	23	248	531
Mehalla el Kobra... ..	30	5	10	95	—	3	40	103
Kafr el Zayat ... ..	13	14	10	17	—	—	23	31
Zagazig ... ..	46	8	—	—	—	—	46	8
Faccus ... ..	10	58	12	6	—	37	22	101
Mansoura ... ..	76	5	2	9	85	892	163	906
Mit Ghamr ... ..	13	—	2	—	3	14	18	14
Damanhour ... ..	90	34	1	1	—	3	91	38
Kafr el Dawar ... ..	27	10	13	2	1	8	41	20
Giza ... ..	75	32	8	49	24	89	107	170
Fayoum ... ..	164	147	11	20	—	—	175	167
Sennuris ... ..	26	30	1	19	—	—	27	49
Beni Suef ... ..	92	126	76	182	—	7	168	315
Minia ... ..	79	2	—	26	25	514	104	542
Assiut ... ..	57	—	—	—	14	23	71	23
Deirout ... ..	5	1	4	1	—	5	9	7
Gerga ... ..	29	51	3	56	—	3	32	110
Tahta ... ..	15	—	1	60	—	—	16	60
Suhag ... ..	41	1	—	—	—	9	41	10
Qena ... ..	22	1	5	1	—	—	27	2
Naga' Hammadi ... ..	27	50	—	—	20	44	47	94
Luxor ... ..	30	25	—	13	—	18	30	56
Aswan ... ..	42	3	15	11	17	120	74	134
<b>TOTAL ... ..</b>	<b>4,109</b>	<b>3,824</b>	<b>790</b>	<b>2,595</b>	<b>558</b>	<b>6,184</b>	<b>5,457</b>	<b>12,603</b>

**TABLE NO. 79.—CURED CASES AND PATIENTS WHO CEASED TO ATTEND BEFORE COMPLETION OF  
THEIR TREATMENT DURING 1947**

Locality of Clinic	Cured Cases				P. who ceased to attend before comp. their treat.			
	Syphilis		Gonorrhoea		Syphilis		Gonorr.	
	M	F	M	F	M	F	M	F
Sayeda Zeinab ... ..	4	1	75	94	342	186	643	671
Shoubra ... ..	29	22	648	621	105	90	87	129
Gamalia ... ..	117	69	916	1,131	124	86	315	1,039
Abbassia... ..	—	—	198	441	79	31	61	269
Old Cairo ... ..	—	—	24	63	25	12	21	113
Khalifa ... ..	—	—	20	140	57	34	36	309
Helopolis ... ..	—	—	1	—	—	—	—	558
Port Said ... ..	2	2	44	44	71	55	123	598
Port Said Health Centre	1	—	3	50	50	111	20	86
Ismailia ... ..	—	—	—	8	68	85	45	523
Suez ... ..	7	8	124	156	—	—	70	172
Damietta ... ..	4	17	29	5	112	337	7	22
Benha ... ..	39	102	27	9	23	50	—	—
Shebin el Kom ... ..	—	—	6	98	97	75	18	29
Menouf ... ..	—	—	3	—	97	62	33	93
Tanta ... ..	—	—	95	70	159	129	153	461
Mehalla el Kobra ... ..	36	26	7	41	108	68	33	62
Kafr el Zayat ... ..	—	—	10	12	26	17	13	19
Zagazig ... ..	1	6	—	—	119	108	46	8
Faccus ... ..	1	2	—	10	21	18	2	12
Mansoura ... ..	10	23	34	10	121	113	3	4
Mit Ghamr ... ..	18	24	2	—	—	—	18	14
Damanhour ... ..	—	—	5	6	162	63	75	24
Kafr el Dawar ... ..	2	2	40	32	39	40	6	22
Giza... ..	4	4	69	139	57	74	28	24
Fayoum... ..	—	5	50	86	232	241	125	81
Shenauris ... ..	—	3	3	3	11	6	4	7
Beni Suref ... ..	5	6	69	173	28	22	26	19
Minia ... ..	26	28	31	6	93	50	57	34
Assiat ... ..	—	—	4	2	94	124	73	13
Deirout ... ..	—	—	3	1	123	216	7	1
Gerga ... ..	—	17	5	49	201	149	36	57
Tahta ... ..	1	1	—	—	66	85	3	5
Suhag ... ..	1	4	—	—	234	276	41	1
Qena ... ..	1	—	1	—	26	41	9	1
Nag Hammadi ... ..	—	—	5	3	28	66	12	25
Luxor ... ..	1	—	30	5	178	250	—	6
Aswan ... ..	—	6	10	11	98	62	56	68
<b>TOTAL ... ..</b>	<b>310</b>	<b>384</b>	<b>2,591</b>	<b>3,566</b>	<b>3,474</b>	<b>3,432</b>	<b>2,342</b>	<b>5,021</b>

**TABLE No. 80.—SKIN DISEASES AT THE SKIN AND VENEREAL DISEASES CLINICS  
DURING THE YEAR 1947**

Locality of Clinic	New Cases		Cured Cases	
	M.	F.	M.	F.
Sayeda Zeinab ... ..	1,700	4,512	5	17
Shoubra ... ..	14,241	20,615	10,579	14,876
Gamalia ... ..	1,484	2,009	767	1,063
Abbassia ... ..	1,654	3,606	1,469	2,910
Old Cairo ... ..	476	1,069	335	812
Khalifa ... ..	1,151	5,393	571	3,099
Heliopolis ... ..	27	9	—	—
Port-Said ... ..	1,862	2,467	1,243	1,653
Port Said Health Centre ... ..	1,732	2,159	—	10
Ismailia ... ..	1,037	1,188	—	—
Suez ... ..	2,274	2,828	943	1,366
Damietta ... ..	2,428	7,166	2,117	6,059
Benha ... ..	2,192	2,182	1,764	1,776
Shebin el Kom ... ..	4,434	6,556	2,780	4,079
Menouf ... ..	4,074	3,950	3,211	2,153
Tanta ... ..	6,752	7,172	4,333	4,392
Mehalla el Kobra ... ..	3,400	2,185	1,108	722
Kafr el Zayat ... ..	1,158	1,247	201	210
Zagazig ... ..	4,468	3,614	266	204
Faccus... ..	1,389	2,134	10	78
Mansoura ... ..	4,210	5,320	3,093	3,930
Mit Ghamr... ..	4,443	5,204	3,012	3,643
Damanhour ... ..	8,135	9,780	5,426	6,981
Kafr el Dawar ... ..	1,708	1,679	1,577	1,558
Giza ... ..	1,673	1,599	750	830
Fayoum ... ..	1,846	2,515	—	—
Sennuris ... ..	1,923	4,787	157	257
Beni Suef ... ..	4,840	4,945	5,234	6,369
Minia ... ..	2,722	3,996	730	933
Assiut ... ..	2,599	3,473	542	622
Deirout ... ..	2,756	2,258	440	526
Gerga ... ..	3,462	7,911	1,818	5,350
Tahta ... ..	2,047	3,243	155	248
Suhag ... ..	2,229	2,241	596	668
Qena ... ..	1,508	3,128	1,434	3,039
Nag Hammadi ... ..	1,109	2,040	468	462
Luxor ... ..	1,149	1,829	112	157
Aswan ... ..	886	1,590	14	48
<b>TOTAL ... ..</b>	<b>107,178</b>	<b>149,599</b>	<b>57,269</b>	<b>81,102</b>

TABLE NO. 81.—SCABIES AT THE SKIN AND VENEREAL  
DISEASES CLINICS DURING THE YEAR 1947

Locality of Clinic	New Cases	
	M.	F.
Sayeda Zeinab ... ..	649	1,118
Shoubra ... ..	2,380	3,479
Gamalia ... ..	706	688
Abbassia ... ..	499	737
Old Cairo ... ..	91	149
Khalifa ... ..	317	1,038
Heliopolis ... ..	5	—
Part-Said ... ..	570	542
Port Said Health Centre ... ..	324	414
Ismailia ... ..	333	299
Suez ... ..	696	586
Damietta ... ..	864	1,959
Benha ... ..	923	753
Shebin el Kom ... ..	2,703	3,127
Menouf ... ..	1,517	1,301
Tanta ... ..	2,778	1,618
Mehalla el Kobra ... ..	735	439
Kafr el Zayat ... ..	444	351
Zagazig ... ..	2,847	2,129
Faccus ... ..	591	665
Mansoura ... ..	1,718	1,923
Mit Ghamr... ..	2,347	2,434
Damanhour ... ..	4,529	5,103
Kafr el Dawar ... ..	720	551
Giza ... ..	413	266
Fayoum ... ..	664	808
Sennuris ... ..	604	1,076
Beni Suef ... ..	1,870	1,614
Minia ... ..	909	877
Assiut ... ..	1,078	942
Deirout ... ..	1,261	688
Gerga ... ..	785	829
Tahta ... ..	547	344
Suhag ... ..	648	436
Qena ... ..	377	301
Nag Hammadi ... ..	565	762
Luxor ... ..	212	169
Aswan ... ..	166	174
<b>TOTAL ... ..</b>	<b>39,540</b>	<b>40,689</b>

TABLE NO. 82.—NEW CASES AND VISITS TO SCABIES BATH  
FOR TREATMENT DURING THE YEAR 1947

Cases		Number of Visits	
M.	F.	M.	F.
4,898	3,169	6,571	4,048

TABLE NO. 83.—HOSPITALS AND CLINICS FROM WHICH PATIENTS WERE  
REFERRED DURING THE YEAR 1947

District	Patients	
	M.	F.
Sayeda Zeinab ... ..	517	443
Shoubra ... ..	1,685	1,620
Gamalia ... ..	384	224
Abbassia .. ...	214	184
Khalifa ... ..	7	1
Old Cairo ... ..	57	32
Giza ... ..	124	41
Bulac health centre ... ..	193	121
Demerdash Hospital ... ..	221	67
King's Hospital ... ..	175	73
School Hygiene Department ... ..	625	288
Other Units ... ..	696	75
TOTAL ... ..	4,898	3,169

## Chapter X—MENTAL DISEASES

The state of overcrowding is still acute. The number of patients in residence at the end of the year is far above that of the last year. Law No. 141 of 1944 has defined the conditions under which a patient can be discharged and accordingly the directors of the two government hospitals are not at liberty as in the past to cut down the number of patients in residence to the reasonable limits of past years.

The outbreak of cholera during the autumn of 1947 was a further evidence of the evils of overcrowding. The epidemic crept to Khanka Hospital and the number of cases could have been much smaller and the disease itself segregated, had there been ample room for isolation.

### *Admissions and discharges :*

The number of patients remaining on January 1, 1947 was 4,782, the admissions numbered 2,871, those discharged or deceased numbered 2,528 thus leaving 5,125 patients on December 31, 1947, as against 4782 in the previous year. The number of beds is still the same namely 3,334 that is an excess of 1791 patients over and above the bedding accommodation. Compared with the maximum and minimum daily residents, this would be 1833 and 1498 patients respectively more than the hospital accommodation.

### *Accused persons suspected of Insanity :*

During the year under review, 183 persons were sent by the Public Prosecutor for examination and report. Of these 63 were accused of crimes of violence, 60 of theft. The Parquet also asked for reports on 19 persons who were admitted as ordinary patients. Thus the number of reports sent to the Parquet totalled 202.

### *Staff :*

The number of medical officers, nursing staff, administrative and clerical personnel is still the same as last year.

### *Ages of persons Admitted :*

Ages of patients ranged between 10 and 100 years.

### *Religions and Nationalities of patients :*

Moslems, Christians, Jews and persons of unknown religions were admitted to both hospitals. Besides Egyptians, admissions included Europeans and Near Easterns.

### *Occupation of male patients :*

The majority were farmers. There were also sailors, artisans, students and servants of religion, unemployed, clerks and government employees.

### *Residence of patients :*

Patients from all provinces and governorates of the Egyptian Kingdom were admitted to both hospitals.

### *Physical condition on admittance :*

The ratio in both hospitals was as follows :

	Khanka	Abbassia
Fair ... ..	48 %	66.43%
Poor ... ..	44.5%	26.80%
Very poor or moribund ... ..	7.5%	6.87%

*Wassermann tests :*

2,353 specimens of blood and 45 specimens of cerebro-spinal fluid were sent to the Laboratories of the Ministry of Public Health, for examination and gave various results.

*Scabies :*

432 cases of scabies were treated locally in both hospitals.

*Accused patients and prisoners in residence :*

Patients accused in crimes numbered 899.

*Deaths :*

The patients who died during their stay in the two hospitals numbered 353. The ratio of deaths compared with the total cases treated is 4.6 % as against 3.8 % in 1946.

*Ophthalmic and Dental Clinics :*

The work in both clinics continued for the benefit of the patients.

*Electric shock and Cardiazol treatment :*

Treatment by both methods continued on a larger scale. Cases of Schizophrenia, Manic Depressive, Confusional Psychosis and Anxiety Neuroses were treated giving results varying between recovery, marked improvement, slight improvement and no improvement.

*Accidents :*

47 major and 1,555 minor accidents took place in both hospitals. One suicide occurred in Abbassia.

*Artificial feeding :*

This was carried out 17,357 times without accidents.

*Epileptic fits :*

8,701 epileptic fits were recorded during the year.

*Physical illnesses :*

9,876 cases were treated locally from physical ailments.

*Births :*

18 children were born in the female wards at Abbassia Hospital.

*Autopsies :*

68 post mortem examinations were made during the year.

*Pharmacy :*

46,574 prescriptions and 1,423 photographs were prepared in the pharmacy of Abbassia hospital and an almost similar number in Khanka.

*X Ray Department :*

190 radiographs and 153 screens were made in Abbassia hospital.

*Central Medical Commission :*

106 Patients in Abbassia were reported upon to the Central Medical Commission other than 30 in Khanka.

***Length of residence:***

The length of residence in hospital ranged between one day and 41 years.

***Escapes:***

12 patients escaped from Khanka Hospital.

***Khanka Farm:***

The production of vegetables from the farm continued as usual ; so also its use as a means of occupational therapy to the patients.

## Chapter XI—HEALTH PROPAGANDA.

As a result of propaganda activities carried out during the year, the public has become health minded. This had a direct bearing on the exemplary achievement of stamping out, within a record time, the cholera epidemic which had broken out late in the year.

***Propaganda activities:***

Three new propaganda units have been allocated in the 1947-1948 budget, bringing the total number to 20 units. These have been active in town and village diffusing health propaganda amongst all classes of the population. The following is a summary of the work carried out by units during the year, exclusive of propaganda carried out in connection with the cholera epidemic :—

	Number
Daytime propaganda meetings ... ..	3,660
Evening propaganda meetings ... ..	1,766
Meetings held in public markets ... ..	1,050
„    „    in Moulids (fairs) ... ..	168
„    „    in schools ... ..	8,268
„    „    in societies and clubs ... ..	592
„    „    for benefit of workmen ... ..	236
„    „    for benefit of Egyptian army ... ..	163
Other meetings held in units of Ministry of Social Affairs public play grounds, social centres, etc. ... ..	389

***Health fairs:***

Health fairs organised in connection with the other sections of the Ministry have proved popular with the population since they were well attended. These have been held in all parts of the country where health culture, advice and lectures on health problems were given and details of these are as follows :—

	Number
Fairs held in connection with child welfare ... ..	180
„    „    „    „    venereal diseases ... ..	230
„    „    „    „    infectious diseases ... ..	340
„    „    „    „    Malaria ... ..	260
„    „    „    „    other general questions, e.g., ancylostoma, nutrition, etc. ... ..	215

***Pamphlets:***

31 pamphlets dealing with various diseases have been reprinted. Copies of these were distributed to the audience during meetings and fairs.

### *Posters :*

New attractive coloured posters were printed. Some copies of these have been distributed for hanging in public places, *e.g.* departments of state, schools, railway stations, post offices, cinemas and social meetings which are frequented by the public.

### *Preaching :*

Advantage has been taken of the deep influence of preaching on the public. By arrangement with the Direction of mosques, Ministry of Wakfs, and El Azhar Preaching Service, preachers and Imams of mosques have been charged with incorporating in their sermons, health advice and instructions. Sermons dealing with health problems and sanitary information have been provided for delivery during preaching.

### *Films :*

Films and apparatus have been readily imported with the result that eight films were produced during the year dealing with intoxicants, typhoid, venereal diseases, cholera, tuberculosis, insects, malaria and nutrition. The scenario of each film deals with some particular health problem of the Egyptian environment in an attractive way and since the characters were also Egyptians, these films have been greatly appreciated by the population. They are shown during special meetings and in cinemas during intervals.

### *Cholera Control :*

A cholera epidemic broke out in Egypt during the latter part of the year. Health propaganda was the backbone of all control measures adopted. All efforts were directed towards instructing the population in how the infection spreads and in measures of protection, the value of immunization and the importance of collaboration with sanitary authorities.

### *Health Propaganda Vehicles :*

Eight more propaganda vehicles were purchased during the year bringing the total number of vehicles in service to 31. These toured the country carrying health advice to town and village.

### *The Cholera films :*

The scenery was taken in infected localities. 30 copies were reproduced which were shown in all cinemas and by propaganda units throughout the country.

### *Literature :*

Two million pamphlets, one million posters and one hundred thousand booklets on cholera were printed and distributed during the epidemic.

### *Broadcasting :*

Senior officials of the Ministry made good use of broadcasting during the epidemic. Some 150 talks and lectures on cholera were broadcasted. This does not include brief instructions which were given during news-bulletins.

A sermon which touched on the cholera epidemic was distributed to preachers and Imams of mosques for delivering during the epidemic.

Other state departments and institutions collaborated in the propaganda campaign against the epidemic, *e.g.* school hygiene department, Ministeries of Wakfs, and War and Marine, etc.

## PART III—TREATMENT.

### Chapter XII—GENERAL HOSPITALS.

*Number of Hospitals :*

There were 89 General Hospitals of which 28 were located in Governorates and chief towns of Provinces. Besides, there were two out-patient clinics.

*Hospital accommodation :*

The total number of hospital beds this year was 6,879 of which 5,815 were reserved for patients and 1,064 for the staff.

*Treatment :*

The number of in-patients amounted to 92,699, and the out-patients to 1,952,519.

*Surgical operations :*

The number of surgical operations carried out in the in-patient departments this year was 39,346 and in the out-patient departments 74,326, as compared with 40,454, and 79,977 respectively in the previous year.

*X. Ray Examination:*

The number of cases examined and treated by X. Rays this year was 25,304 as against 29,309 in 1946.

*Deaths :*

The number of deaths amongst patients treated in the in-patient departments was 4,693 from a total of 92,699 patients *i.e.* 5.06 per cent as compared with 3.3 per cent in last year.

TABLE NO. 84.—SHOWING NUMBER OF HOSPITALS OPERATED BY THE HOSPITALS SECTION  
DURING THE PERIOD FROM 1938-1947

Year	Hospitals in Chief towns of provinces and Governorates	Hospitals in Bandar towns	Village Hospitals	Hospitals in the Oases	Out-patient Clinics
1938 ... ..	20	48	62	—	3
1939 ... ..	20	48	62	—	3
1940 ... ..	20	51	62	—	3
1941 ... ..	20	52	—	—	3
1942 ... ..	20	52	—	—	4
1943 ... ..	26	52	—	—	3
1944 ... ..	27	53	—	—	2
1945 ... ..	27	53	—	6	2
1946 ... ..	28	61	—	6	2
1947 ... ..	28	61	—	—	2

TABLE NO. 85.—NUMBER OF BEDS IN GENERAL HOSPITALS

Year	Number of Beds	Notes
1938 ... ..	6,822	
1939 ... ..	6,979	
1940 ... ..	6,928	The Lock Hospitals were separated from the Section.
1941 ... ..	6,969	The village Hospitals were separated from the Section.
1942 ... ..	6,880	
1943 ... ..	6,363	Alexandria Hospital was separated from the Ministry.
1944 ... ..	6,553	
1945 ... ..	6,663	
1946 ... ..	6,014	
1947 ... ..	6,879	The Oases Hospitals and Demerdash Hospital were separated from the Section.

TABLE NO. 86.—DISTRIBUTION OF HOSPITAL BEDS

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Beds for Staff	Total No. of Beds
King's	—	—	—	238	9	—	247	104	351
Helmiyet el Zeitoun	—	—	—	330	12	—	342	91	433
Boulac Health Centre	—	—	—	32	—	6	38	30	68
Chronic Diseases, Helwan	—	—	—	90	—	—	90	15	105
Port-Said	2	2	12	166	13	—	194	21	215
Suez	4	11	—	193	—	25	233	18	251
Damietta	—	2	—	88	—	37	127	13	140
Damanhour	—	4	—	89	5	—	38	15	113
Tanta	—	4	—	218	2	—	224	88	312
Mansoura	—	—	—	182	10	—	202	26	228
Mit Ghamr...	—	—	—	47	—	12	59	8	67
Zagazig	1	3	—	208	12	—	224	16	240
Shebin el Kom	—	2	—	88	—	—	90	6	96
Benha	—	—	—	66	—	—	66	9	75
Kaliub	—	—	—	89	—	—	89	4	93
Fayoum	—	1	—	92	8	—	101	6	107
Beni-Suef	—	—	—	96	—	—	96	6	102
Minia	—	2	—	108	12	—	122	34	156
Fikria	—	—	—	17	—	13	30	6	36
Maghagha	—	—	—	—	—	—	—	1	1
Assiut	—	—	—	183	11	—	194	18	212
Mallawi	—	—	—	28	—	11	39	4	43
Souhag	—	2	—	103	—	—	105	24	129
Tahta	—	—	—	32	—	—	32	5	37
Qena	—	—	—	71	2	—	73	11	84
Luxor	5	7	—	76	—	—	88	9	97
Esna	—	—	—	68	—	23	91	14	105
Aswan	1	2	—	48	—	25	76	3	79
Ismailia	—	2	—	84	—	12	98	17	115
Delingat	—	—	—	30	—	12	42	6	48
Kafr el Dawar	—	—	—	37	—	8	15	10	55
Rosetta	—	—	—	29	—	12	41	8	49
Shubrakheet	—	—	—	30	—	12	42	8	50
Edfeena	—	—	—	44	—	—	44	6	50
Kom Hamada	—	—	—	29	—	11	40	9	49
Mahmoudia	—	—	—	21	—	—	21	3	24
Desouk	—	—	—	35	—	12	47	9	56
Mehalla el Kobra	—	—	—	114	—	—	114	12	126
Samanoud	—	—	—	38	8	—	46	7	53
El Tayeba	—	—	—	48	—	8	56	6	62
Sherbeen	—	—	—	39	—	12	51	7	58
Zifta	—	—	—	45	—	—	45	11	56
Kafr el Zayat	—	—	—	32	—	8	40	11	51
El Ebsheet...	—	—	—	—	—	—	—	—	—
Faraskour	—	—	—	31	—	8	39	7	46
Sinbellawein	—	—	—	28	—	12	40	8	48
Manzala	—	—	—	35	—	—	35	9	44
Aga	—	—	—	44	—	8	52	10	62
Dikernes	—	—	—	46	—	8	54	11	65
Belbeis	—	—	—	24	—	12	36	9	45
Faccous	—	—	—	31	—	6	43	8	51
Minia el Kamh	—	—	—	26	—	11	34	8	42
Zawamel	—	—	—	33	—	16	29	8	37
Tala	—	—	—	29	—	11	40	9	49
Ashmoun	—	—	—	37	—	12	49	9	68
Menouf	—	—	—	60	—	16	76	11	87
Zawiet el Naoura	—	—	—	36	—	8	44	7	51
Shebeen el Kanater	—	—	—	27	—	12	39	8	47
Shubra el Khema	—	—	—	22	—	—	22	5	27
Kafr Azaz	—	—	—	30	—	—	20	4	24
Kafr el Sheikh	—	—	—	59	—	—	59	7	66
Fowa	—	—	—	36	—	—	36	6	42

TABLE No. 86. (Contd.)

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth.	Total beds for patients	Staff Beds	Total No. of Beds
Basentiwai ... ..	—	—	—	20	—	—	20	4	24
Biala ... ..	—	—	—	20	—	—	20	4	24
Saff ... ..	—	—	—	30	—	12	42	8	50
Ayat ... ..	—	—	—	49	—	16	66	10	75
Itsa ... ..	—	—	—	27	—	12	39	8	45
Wasta ... ..	—	—	—	25	—	12	37	9	46
Beba ... ..	—	—	—	35	—	12	47	10	57
Beni Mazar ... ..	—	—	—	48	—	—	48	13	61
Fashn ... ..	—	—	—	29	—	12	41	9	50
Samalout ... ..	—	—	—	58	—	—	58	8	66
Deirout ... ..	—	—	—	30	—	12	42	10	52
Badari ... ..	—	—	—	23	—	8	31	7	38
Sahil Selim ... ..	—	—	—	25	—	8	33	12	45
Manfalout ... ..	—	—	—	40	—	—	40	5	45
Mataana ... ..	—	—	—	—	—	—	—	—	—
Abou Tig ... ..	—	—	—	35	—	2	43	8	51
Akhmim ... ..	—	—	—	28	—	12	40	7	47
Baliana ... ..	—	—	—	24	—	12	36	7	43
Gerga ... ..	—	—	—	35	—	12	47	9	56
Dishna... ..	—	—	—	25	—	8	33	8	42
Kous ... ..	—	—	—	36	—	12	48	6	54
Nag Hamadi ... ..	—	—	—	28	—	14	42	9	51
Kom Ombo ... ..	—	—	—	23	—	—	23	6	29
Edfou ... ..	—	—	—	26	2	14	42	6	48
Eneiba ... ..	—	—	—	9	—	—	9	3	12
Dahabiet el Dirr ... ..	—	—	—	—	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>13</b>	<b>44</b>	<b>12</b>	<b>5,052</b>	<b>106</b>	<b>588</b>	<b>5,815</b>	<b>1,064</b>	<b>6,879</b>

*Treatment :*

The following table No. 87 shows the number of patients treated in Hospitals.

TABLE No. 87.

Year	No. of In-Patients	No. of Out-Patients	No. of attendance to out patient sections
<b>1943 ... ..</b>	87,326	1,749,732	3,256,737
<b>1944 ... ..</b>	94,895	2,286,758	3,980,336
<b>1945 ... ..</b>	96,663	1,850,888	3,495,322
<b>1946 ... ..</b>	103,496	2,285,035	3,920,413
<b>1947 ... ..</b>	92,699	1,952,519	3,363,931

*Operations and X. Ray Examinations:*

The following table No. 88 shows the number of operations and X. Ray examinations performed in the hospitals during the last 5 years.

TABLE No. 88.

Year	In-patients Operations	Out-patients Operations	TOTAL	X. Ray Examinations.
1943 ... ..	32,110	71,096	103,206	19,605
1944 ... ..	32,174	73,622	105,796	21,639
1945 ... ..	37,730	76,447	114,177	28,565
1946 ... ..	40,454	79,977	120,431	29,309
1947 ... ..	39,346	74,326	113,672	25,304

*Deaths :*

The following table No. 89 shows the number of in-patients treated in the hospitals during the last five years and the number of deaths and death-rates in each year.

TABLE No. 89

Year	No. of in-patients	No. of Deaths	Death rates per cent
1943 ... ..	87,326	5,860	6.71
1944 ... ..	94,895	5,678	5.99
1945 ... ..	96,663	4,570	4.72
1946 ... ..	103,496	3,453	3.3
1947 ... ..	92,699	4,693	5.06

*Venereal Diseases :*

The following table No. 90 shows the number of prostitutes treated in the General and District Hospitals during the year 1947.

TABLE No. 90

Gonorrhoea	Syphilis	Other Diseases	TOTAL
5	62	—	67

The following table No. 91 shows the total number of patients treated for venereal diseases in the General and District Hospitals during the year 1947.

TABLE No. 91

In patient Sections			Out-patient Sections		
Gonorrhoea	Syphilis	Total	Gonorrhoea	Syphilis	TOTAL
14	261	275	8,441	16,231	24,672

## Chapter XIII—OPHTHALMIC HOSPITALS

### *New Units :*

During the year, a new ophthalmic hospital was opened at Kaliub and an ophthalmic branch at Inshas. Ophthalmic treatment was introduced at Mataana and Kom Ombo. Equipment and personnel for the latter three units were procured from other ophthalmic units until budget credits are provided.

### *1948/1949 Budget :*

Credits were provided in the budget for the equipment and functioning of an ophthalmic Branch at Mataana and a permanent ophthalmic hospital at Kom Ombo, to be accommodated in one of the Kom Ombo Estate buildings.

The plan to extend ophthalmic treatment to all parts of the country is under execution.

### *Clinical Works :*

The following is a summary of the clinical work carried out during 1947 as compared with that of 1946 :

	1946	1947
Number of new patients ... ..	1,246,232	1,102,994
„ „ In-patients ... ..	37,344	32,250
„ „ Operations ... ..	262,305	229,115
„ „ Outpatient attendances ... ..	7,299,385	6,373,798

Owing to the outbreak of the Cholera epidemic and the suspension of ophthalmic treatment in a number of ophthalmic units as a result, the work during the year was less than in the previous year.

The number of patients who were found blind in one or both eyes, excluding cataract cases causing blindness, was 39,168 *i.e.* 3.3 per cent of the total patients examined at the ophthalmic hospitals. By adding the cataract cases causing blindness, the ratio becomes 3.6 per cent.

Acute ophthalmias represent 81 per cent of the pathological causes of blindness.

The gonococcus is still the predominant etiological factor of acute ophthalmias ; its ratio to total micro-organisms being 38.06 per cent.

### *Ages of Patients :*

Of a total of 1,102,994 new patients treated, 95,770 or 8.7 per cent were under one year of age ; 329,853 or 28.9 per cent between one and 15 years ; 274,452 or 24.9 per cent between 16 and 30 years and 604,305 or 53.8 per cent between one and 30 years of age.

This shows that the masses realise the importance of ophthalmic treatment for infants, children and youths.

### *Ophthalmic treatment in Schools :*

Ophthalmic clinics are at the present time provided in 36 government primary schools in Cairo and the provinces.

Following the creation of a School Hygiene Department within the Ministry of Education, medical officers of that Department have undertaken ophthalmic treatment of pupils in almost all the Schools. In nine of the schools where medical officers of the School hygiene Department are not available, medical examination, inspection and treatment are still undertaken by medical officers of the Ophthalmic Section.

The number of pupils examined in the nine schools totalled 3,643. 97 per cent of this number were found suffering from trachoma in its various stages. Of these, 31.5 per cent were in the serious stages of the disease, *i.e.* trachoma I and II. As a result of ophthalmic treatment, this latter ratio fell to about 10.4 per cent.

Besides, pupils of 77 other schools were treated by ophthalmic hospitals in the localities having no school clinics.

#### *Other Services :*

Ophthalmologists of this Ministry pay regular visits to the following institutions and hospitals for the purpose of examining and treating ophthalmic cases :

Leprosy Colony and Hospital at Abu Zaabal and Siufia.

Mental Hospitals at Abbassia and Khanka.

Children Preventorium at Gîza.

Children Dispensary at Mataria, Cairo.

Fever Hospitals at Abbassia and Embaba.

Convalescents Home and Children Preventorium at Marg.

Ophthalmologists are occasionally delegated to Arish, Tor and the Oases to examine and treat the inhabitants.

During Pilgrimage, a medical mission including ophthalmologists proceeds to the Hedjaz to undertake the free treatment of pilgrims of all nationalities in Mecca and Medina.

#### *Accommodation :*

The total number of beds in all ophthalmic units was 2,310. Where space permits, beds are added to provide more in-patient accommodation for treatment of the population.

#### *Post-Graduate Course of Ophthalmology :*

Fresh graduates are annually given post graduate courses in medical and eye surgery with a view to raising the standard of ophthalmology in Egypt.

The course starts in October and ends in April of each year. Two examinations are held. The preliminary examination towards the end of April and the final in November.

#### *The Ophthalmic Library :*

There is a circulating ophthalmic library, with headquarters at Rod el Farag Ophthalmic Hospital, Cairo, for the benefit of all medical officers in ophthalmic units. It is kept supplied with old and new ophthalmic literature which is placed at the disposal of all medical officers with the object of keeping them thoroughly acquainted with recent developments and progress in the ophthalmic field. Important books and references indispensable to junior medical officers are usually provided in several copies to facilitate their circulation.

#### *Modern Apparatus for Ophthalmic Hospitals :*

The Ministry continues to provide ophthalmic units with modern apparatus and instruments.

## Chapter XIV—PHARMACIES

### *Private Pharmacies :*

33 permits for new private pharmacies were granted this year by the Ministry. Approval was given to the transfer of ownership of 24 pharmacies, some of which were owned by non-pharmacists, to qualified pharmacists.

### *Night Service Pharmacies :*

The number of night service pharmacies in operation this year was the same as in the previous year, namely three in number. These dispensed 9,162 prescriptions, not including patented preparations which are dispensed without prescriptions.

### *Poisonous Drug Stores.—Schedules I and II.*

18 permits for dealing in poisonous substances of schedule I and II were granted this year as follows : 10 in Cairo, one in each of Gharbia, Sharkia, Menoufia and Qena and two in each of Giza and Assiut .

### *Schedule IV Drug Stores :*

32 permits were granted this year for schedule IV Drug Stores : 15 in Cairo, 13 in Alexandria and one in each of Giza, Gharbia, Damietta and Behera. The one in Giza has since been cancelled.

### *Schedule V Drug Stores :*

Four permits for dealing in medicinal plants were granted this year : One in Cairo, 2 in Alexandria and one in Assiut. This last has since been cancelled.

### *Schedule XI Drug Stores :*

20 permits for new simple drug stores were granted during the year : 3 in Cairo, one in each of Beni Suef, Giza, Canal, Minia, Menoufia and Sharkia, two in each of Behera and Sinai, 3 in Dakahlia and 4 in Gharbia.

### *Registration of Egyptian Specialities :*

68 permits were granted for the preparation and sale of Egyptian specialities and 10 specialities were refused registration during the year 1947. This brings the total number of registered specialities to 1580.

### *Agents :*

16 permits for agents having depots and 5 permits for agents without depots were granted by the Ministry during the year.

### *Private Dispensaries and Hospitals :*

No permits for new private dispensaries or hospitals were granted during the year.

### *Application of the Law :*

Out of a total of 296 procès-verbaux of contravention drawn up during the year, 146 were for possessing or dealing in poisonous substances or drugs without permits, 18 for practising pharmacy without permits and 83 against pharmacists and assistant pharmacists for contravening the law.

TABLE No. 92.—QUANTITIES OF STUPEFACIENTS IMPORTED INTO EGYPT AND EXPORTED THEREFROM DURING 1947

Name of drug	Quant. importd		Quant. exported	
	Kg.	gr.	Kg.	gr.
Opium and its preparations ... ..	76	—	—	—
Morphine and its salts ... ..	1	·627	—	—
Cocaine and its salts ... ..	1	·257	—	—

Quantities of stupefacients confiscated for illicit import and export :

	Kgrs.
Opium ... ..	3,654
Cannabis Indica ... ..	8,459
Heroin ... ..	1
Cocaine ... ..	1

Quantities of stupefacients Consumed for medicinal purposes :

	Kgrs.
Opium and its preparations ... ..	76
Morphine and its salts ... ..	1.570
Cocaine and its salts ... ..	2.080

## Chapter XV—UNIVERSITIES HOSPITALS

### FOUAD I HOSPITAL

The number of beds during this year was 1,436 or seven beds less than in 1946. These were removed from the Casualty Department which has now 43 beds instead of 50 last year :

It is interesting to state that when first opened for treatment in 1936, this hospital had an accommodation of 543 beds distributed among three departments : the Medical Diseases, the Casualty and the X-Rays Departments. This accommodation has steadily increased until it reached its present year's figure of 1,436 distributed among thirty Departments.

It is anticipated that within the next few years, this accommodation will reach its full strength of 2000 beds.

The following table No. 93 gives the distribution of beds among the different departments during 1947 as compared with their number in 1937 :

TABLE No. 93

Department	No. of beds	
	1937	1947
Medical Diseases ... ..	450	500
Tropical „ ... ..	—	75
Dermatology ... ..	—	75
Ophthalmic ... ..	—	150
Casualty ... ..	50	43
Erysipelas ... ..	—	50
Researches ... ..	—	50
Neurology ... ..	—	75
Chest ... ..	—	75
Sexology ... ..	—	75
Gynaecology ... ..	—	150
Radiology ... ..	43	43
Urology ... ..	—	75

It is to be noted that the number of beds trebled and the number of patients treated increased in proportion.

#### IN-PATIENTS

TABLE No. 94.—NUMBER OF INPATIENTS IN  
EACH DEPARTMENT AS COMPARED  
WITH THOSE OF 1946

Department	1946	1947
Medical Diseases ... ..	7,098	7,769
Neurology ... ..	579	604
Tropical Diseases ... ..	1,085	981
Chest ... ..	312	225
Casualty ... ..	5,061	4,573
Dermatology ... ..	1,146	835
Sexology ... ..	1,066	854
Radiology ... ..	447	350
Erysipelas ... ..	603	758
Ophthalmic ... ..	1,454	1,656
Gynaecology ... ..	1,788	1,747
Urology ... ..	1,080	1,120
	<b>21,719</b>	<b>21,472</b>

This table shows that the increase does not only affect the medical diseases department but also the neurology, the erysipelas, the urology and the ophthalmic departments. This latter, it will be remembered, was transferred from Kasr el Aini Hospital during the second half of November 1946. Other departments, however, show a decrease in the number of admissions, particularly the Casualty Department. This is attributed to the cholera outbreak during the latter quarter of 1947 and the transfer to the fever hospitals of all casualty cases suffering from food poisoning since their symptoms were identical with those of cholera.

The following table No. 95 gives the discharges and deaths recorded during the period from 1937-1947 :

TABLE No. 95

Year	Discharges	Deaths	Death rate per cent.
1937 ... ..	11,844	741	6.2
1938 ... ..	14,408	904	6.3
1939 ... ..	14,077	905	6.4
1940 ... ..	17,555	126	5.2
1941 ... ..	15,105	1,081	6.4
1942 ... ..	16,805	1,081	6.4
1943 ... ..	18,276	793	4.1
1944 ... ..	19,537	1,027	5.3
1945 ... ..	21,358	1,011	4.7
1946 ... ..	20,264	944	4.6
1947 ... ..	21,558	955	4.2

Despite the ever increasing number of in-patients, the deaths according to this table are steadily decreasing ; a result which is both gratifying and indicative of the interest and care accorded to patients.

#### *Diagnosis of Medical Diseases :*

Apart from the casualty cases, the diagnosis of the medical diseases cases treated during the year and numbering 13,724 (9,393 males and 4,331 females) fall under ten groups as follows :

#### *GROUP I.—Diseases of the Respiratory System :*

These include affections of the nose, naso-pharynx, the larynx and trachea, the lungs, the bronchi, the pleura and the mediastinum. The most prevalent of these diseases were those affecting the lungs. These accounted for 1,369 cases including 1,046 males. Affections of the bronchi follow next with 587 cases including 449 males, 445 patients including 334 males suffered from diseases of the pleura.

#### *GROUP II.—Diseases of the Digestive System :*

These included affections of the mouth, the oesophagus, stomach, the intestines, the colon, the abdomen, the rectum and anus, the liver, the bile ducts and gall bladder, the pancreas, the peritoneum and parasitic infections. These latter were the most prevalent accounting for 654 cases including 522 males. Affections of the liver come next with 568 cases and 425 males; then come diseases of the stomach with 369 cases and 254 males and diseases of the bile ducts and gall bladder accounting for 206 with 147 females or about three times the males.

GROUP III.—*Diseases of the Cardio Vascular System :*

These accounted for 3,331 cases including 1,620 patients (977 males and 643 females) suffering from heart affections, 948 patients suffering from cardio vascular affections and 429 patients from diseases of the vessels.

GROUP IV.—*Diseases of the Uro-genital System :*

These accounted for 936 cases including 510 uro-genital affections of which 311 were urinary bilharziasis, 300 affections of the kidney and ureter and 105 affections of the bladder and urethra.

GROUP V.—*Diseases of the Central Nervous System :*

These accounted for 1808 cases including 697 affections of the cerebral hemispheres and 394 affections of the Uraneal nerves. Amongst the former were 356 hemiplegia, 85 cerebral arteriosclerosis and 78 epilepsy. Amongst the latter, 134 were sciatica and 114 neuritis.

GROUP VI.—*Diseases of the Blood, Lymphatics and the Spleen :*

These accounted for 900 cases including 401 cases of anæmia, 380 cases of diseases of the spleen and 71 cases of diseases of the lymphatics. Among the first, 137 were parasitic and 91 due to iron deficiency.

GROUP VII.—*Diseases of the Metabolism and Endocrine Glands :*

These accounted for 606 cases of the former and 79 cases of the latter. Of the former 308 were diabetes mellitus and 236 pellagra ; of the latter 57 were thyrotoxicosis. There were besides, 33 cases of diseases of the pituitary gland.

GROUP VIII.—*Diseases of the Bones and Joints :*

These accounted for 450 cases of the former and 44 cases of the latter which included 135 cases of osteoarthritis and 82 cases of arthritis.

GROUP IX.—*Infectious Diseases and Fever :*

These accounted for 215 cases including 135 cases of rheumatic fever and 20 malaria.

GROUP X.—These were 299 cases of miscellaneous diseases.

*Casualty Department of Fouad I Hospital.*—During 1947 a total of 4,543 casualty cases were received as compared with 5,020 cases in the previous year *i.e.* 477 cases or 9 % less. This may be attributed to two causes :

1.—Building repairs undertaken in the department which necessitated the rejection of mental cases thus only 61 cases were received during the year as against 304 in 1946.

2.—The cholera outbreak and the transfer to isolation hospitals of all casualty cases suffering from food poisoning since their symptoms were identical with those of cholera.

It is interesting to note that one third of the casualty cases were food poisoning, one fifth scorpion stings and 15 % were due to petroleum poisoning.

*Out-patients.*—A persistent decrease in out-patients, both new and old, has been observed since 1944. The total number of out-patients during the year under review was 811,666 as against 983,333 in 1946 and 1,357,680 in 1945.

This decrease in out-patient attendance is mainly attributed to the creation in different quarters of Cairo City of various dispensaries and out-patient clinics which have attracted patients in the neighbourhood who would otherwise have attended this department. The cholera outbreak during the last quarter of the year was another factor in this decrease. The out-patient department had to be closed down for some time as a precaution against the spread of cholera amongst hospital attendance which amounted to a few thousands daily.

## KASR EL AINI HOSPITAL

Of a total of 6,200 casualty cases admitted during this year 646 were fatal.

Motor vehicles figure foremost amongst the causes accounting for 1048 cases as compared with 941 cases in the previous year. Motor cycles, bicycles and other means of transport accounted for another 564 cases. Trams accounted for 473 cases as against 445 in 1946. There were 1578 cases due to falls :544 of these were falls from height, 440 falls downstairs and 594 falling over; 892 cases with 339 deaths were due to burns and 269 cases with 62 deaths to scalds including 189 infants. Quarrels accounted for 458 cases with 6 deaths. Labour accidents accounted for 211 cases with four deaths. Solid bodies accounted for 310 cases as against 234 in 1946. 247 cases were due to foreign bodies swallowed or penetrated into the body as against 130 in 1946.

It would appear that the congestion of population in Cairo City has been responsible for this increase in casualty cases.

### *Discharges :*

Among the 24,978 patients discharged during the year, 13,367 were cured and 10,151 were referred to outpatient departments for completion of treatment. 1361 deaths were recorded *i.e.* a ratio of 5.4% or the same ratio as last year. It is worth mentioning that 646 of these deaths were casualty cases arriving at the hospital in a dying condition.

Patients treated in the surgical department numbered 21,974 as against 19,154 in 1946 or 2,820 patients more than last year.

### *Fouad I Children's Hospital :*

The in-patient accommodation remains the same as in the previous year, namely 161 beds. Of these, 118 beds are reserved for medical diseases. The remaining 43 beds are distributed among the surgical, ear, nose and throat, ophthalmic and dental sections.

The number of in-patients treated during the year was 2,921 or 550 more patients than last year. Most of the increase was in the medical diseases department where a total of 1407 were treated as against 1,051 in 1946.

1,862 children were discharged as cured, 562 were transferred to other hospitals or the out-patient department for completion of treatment and 498 children died during the year. The death rate was 17 % the lowest since 1937. The medical diseases department had the largest number of patients namely 2,303 with 477 deaths. Surgical department comes next with 588 patients and 21 deaths.

June and July were the most congested months of the year.

## OUT-PATIENT DEPARTMENT

A total of 595,471 patients (317,675 new and 277,796 old) attended the out-patient department during the year, or 30,010 patients more than last year. May, June and July were the most crowded with an average of 60,000 patients in each. October had the lowest number of 32,441 patients.

Among the patients, 46,782 suffered from diseases of malnutrition, 65,578 from diseases of the intestines, 41,410 from respiratory system diseases and 19,291 from infectious diseases.

*Central Hospital and Shatby Annex :*

The number of beds was this year 601 or 17 beds more than last year. Of the 17 beds, 10 were added to the gynaecological and obstetric department, 6 to the surgical department and one to the ophthalmic department.

The accommodation has not yet reached its full strength before the foundation of the faculty of medicine and its laboratories. It is hoped, however, that with the several constructions in progress, the strength of this hospital will reach 1,500 beds to meet the ever increasing number of patients. The Shatby annex lies in close proximity to the central hospital and holds 111 beds. 52 of these beds are reserved for medical diseases and 59 for surgical diseases.

*In-patients :*

A total of 16,964 in-patients (10,464 males and 6,500 females) were treated in both hospital and annex during the year. The surgical department is the most congested. 7,479 surgical cases and 1,343 fractures or more than half the in-patients, were treated in the surgical department. Medical diseases department comes next with 3,806 in-patients. Then follows the gynaecological and obstetric department with 2,169 in-patients and the skin and venereal diseases department with 1,065 in-patients.

1,100 deaths were recorded among a total of 16,977 discharges or 6.5 per cent. A large number of these deaths are the result of accidents and arrive at hospital in a dying condition.

*Diagnosis :*

4,046 medical diseases cases were diagnosed during the year.

These fell under 10 groups, namely :

- (1) Respiratory system diseases numbered 935 with 399 T.B. cases.
- (2) Digestive system diseases numbered 743 with 180 parasitic cases.
- (3) Cardio-vascular system diseases numbered 223 with 202 rheumatic heart diseases cases.
- (4) Urogenital system diseases numbered 120 cases.
- (5) Nervous system diseases numbered 480 cases.
- (6) Blood diseases numbered 189 cases.
- (7) Metabolic and endocrine gland diseases numbered 219 cases.
- (8) Joint and bone diseases numbered 187 cases.
- (9) Infectious diseases and fevers numbered 75 cases.
- (10) Other diseases numbered 420 cases including 99 cases of food poisoning and 32 cases of drug poisoning.

8,616 surgical cases were diagnosed. These included 1,064 cases of pyogenic infections, 750 wounds, 1,388 fractures, 670 affections of the brain and meninges, 965 affections of the intestines, 341 affections of the kidneys and 151 affections of the testis and epididymis.

*Out-Patients :*

A total of 628,814 outpatients (193,431 new and 435,383 old) were treated by the outpatient Department this year. This number is 116,532 out patients less than last year. This is explained by the fact that following the outbreak of cholera, the department was closed for outpatients for sometime to stop over-crowding of outpatients and the inevitable spread of cholera. Moreover, a number of patients preferred to attend new dispensaries recently set up within their neighbourhood to going a long way to the outpatient department.

The ophthalmic section was attended by the greatest number of outpatients, namely 180,623 or more than one third of all outpatients. The surgical section comes next with 153,309 attendances, and then the medical diseases section with 130,437 attendances.

The hospital has, besides, an out-patient section for tropical diseases. This was attended by 54,897 out patients.

## PART IV—ENDEMIC DISEASES

### Chapter XVI—Ancylostoma and Bilharzia

#### I. NEW UNITS.

##### A. *Out-patient Units :*

Two new units were inaugurated this year in connection with Dessouk and Nag' Hamadi District Hospitals, and one at Abul Matameer No. 43 Ancylostoma Travelling Hospital. The General Hospitals Section offered its Floating Hospital at Derr for the treatment of endemic diseases patients among the inhabitants of Aswan Dam District.

##### B.—*New In-patient units :*

I.P. Depts. were inaugurated in fifteen units, thereby bringing the number of units with I.P. accommodation to 66, and the number of beds therein to 639.

#### II. TRANSFER OF UNITS.

The location of 9 units has been re-arranged so that the distribution of the units is now even throughout the Country.

#### III. VOLUNTARY TREATMENT.

##### A.—*Out-patient Departments :*

##### (i) *Treatment of patients attending the Units :*

The number of new patients was	...	...	...	...	...	...	1,020,457
„ injections administered	...	...	...	...	...	...	3,553,688
„ anthelmintic doses	...	...	...	...	...	...	434,482

##### (ii) *Treatment of school pupils with the consent of their parents or guardians.*

This year, the number of pupils examined all over the Country amounted to	...	...	...	...	...	...	...	21,169
of these	3,588	proved	positive	for	Bilharzia.			
	606	„	„	„	Ancylostoma.			
	2,938	„	„	„	Ascaris.			

Positive Bilharzia cases were given 20,765 injections (2,639 for new and 18,126 for old cases).

2,405 cases were given anthelmintic doses (2,398 new and 7 old).

##### (iii) *Treatment of the Territorial Force :*

A total of 1,988 members of the Territorial force were examined.

Of these	1,122	proved	positive	for	Bilharzia.
	592	„	„	„	Ancylostoma.
	750	„	„	„	Ascaris

Bilharzia cases were given 11,156 injections, (1,005 new and 10,151 old).

923 cases were given anthelmintic doses (863 new and 60 old).

##### (iv) *Treatment of the Reserve Force :*

At the request of the Ministry of Interior, Ancylostoma units all over the Country have been instructed to treat men of the army reserve proposed for police appointment.

(v) *Branch Clinics :*

Branch clinics in connection with Ancylostoma hospitals have been set up in the following localities :

Locality	Ancylostoma Hospital at	Date Opened
Agayza ... ..	Quesna (No. 10)	1/4/1947
Shabas el Shuhada ... ..	Dessouk (No. 12)	„
Istanha (Menoufia) ... ..	Benha	4/6/1947
Mandara (Alexandria) ... ..	Attarine (Alex.) (No. 2)	1/4/1947

(vi) *Issue of free meals to outpatients with severe anaemia and pellagra.*

A total of 43,054 free meals were served to patients in 71 units.

B.—*In-Patient Treatment :*

The total number of beds at the I.P. Depts. of Ancylostoma units amounted to 639 beds.

The number of inpatients treated therein was ... .. 6,496

The number recovered ... .. 6,322

The rest improved. None died.

IV.—SOME POINTS OF INTEREST.

A.—*Shortening the duration of Bilharzia treatment by the use of Repodral :*

It was decided to give Repodral injections on ten successive days. Still positive cases would be given two additional injections. No repetition of treatment before the lapse of one month.

B.—*Treatment experiments with certain drugs.*

(i) *Treatment of Amoebic Dysentery with "ORARSAN".*

The experiment undertaken by the Fouad I Institute and Hospital for Tropical Diseases, is still under investigation.

(ii) *Treatment of Chronic cystitis due to Bilharzia, with 10 per cent Cibazol :*

This experiment is still under investigation.

(iii) *The treatment of Anaemia with ferrous sulphate tablets with envelope soluble in the intestines only.*

This experiment was first undertaken at the inpatient department of No. 10 Ancylostoma Hospital, Quesna, and then referred to the Fouad I Institute and Hospital for Trop. Diseases. The Institute reported successful and very satisfactory results as compared with treatment with ferrum ammonium citrate. It was, therefore, decided to adopt the former method of treatment in all ancylostoma units.

(iv) *Treatment of Ancylostoma with Tetrachlor-ethylene :*

The Fouad I Institute and Hospital for Tropical Diseases tried tetrachlorethylene in gelatine capsules with unsatisfactory results. This drug is now tried without putting it in gelatine capsules. But the results are not yet known.

(v) *Treatment of Ascaris with Hexyld Resorcinol :*

This drug was given to patients who cannot tolerate oil of chenopodium treatment, i.e. cases of severe debility, pregnant, children under 4 years of age, and kidney and heart diseases patients.

C.—*Floating Hospital at Derr :*

This hospital was borrowed from the General Hospitals Section for the treatment of inhabitants of the villages and Nage's in the Aswan Dam area. 554 patients were treated by this Hospital. The number of injections given to Bilharzia cases amounted to 1,520 and the number of anthelmintic dose given was 350.

D.—*Cooperation with other Sections undertaking treatment of Endemic Diseases :*

(i) *General Hospitals Section :*

It was agreed to provide the following district hospitals, hitherto devoid of ancylostoma branches, with Laboratory Assistants ; as well as instruments necessary for examination work, provided the M. Os. of these hospitals undertook the treatment of endemic diseases patients.

Incurable Diseases Hospital, Helwan.

Zifta Hospital.

Edfina Hospital.

Mata'ana Hospital.

Shubra el Kheima, Hospital.

Samannoud Hospital and

Eneiba Hospital.

(ii) *Cooperation with the Frontier Districts Medical Section :*

It was also agreed to apply the same procedure to Siwa Oasis Hospital. The question of introducing the same arrangement in Baharia Oases and Mersa Matrouh, is under consideration.

(iii) *Cooperation with the Red Crescent Society :*

It has been arranged with the Red Crescent Association to institute similar centres in the Princess Fadia Foundation at Abbassia and in Arment Hospital.

(iv) *Cooperation with the School Hygiene Department, Ministry of Education :*

The Ancylostoma units continued the examination of pupils and issue of certificates of freedom from Bilharzia to negative pupils, meanwhile reporting positive pupils to M.Os. of the Ministry of Education to supervise their treatment. Besides, it was arranged to set up joint treatment centres which were provided with Repodral as well as instruments.

(v) *Cooperation with the Medical Section of the Ministry of Wakfs :*

It was arranged with the Medical Section of the Ministry of Wakfs to set up treatment centres within their medical units for the treatment of endemic diseases.

(vi) *Cooperation with the Farmer's Department, Ministry of Social Affairs :*

As a preliminary step to future cooperation with the Farmer's Department of the Ministry of Social Affairs, a large number of laboratory assistants have been trained in microscopic examination technique prior to appointment in treatment centres within social service units.

(v) *Raising the scientific standard of staff (Training):*

Laboratory Assistants and other members of the staff have been trained in the Training Centre at Fom el Khalig Ancylostoma Hospital before taking up their duties in the ancylostoma and other medical units, namely, 21 new M.O.'s for the ancylostoma Section and 109 Laboratory Assistants for the other Medical services (*i.e.* the Rural Hygiene Department, the General Hospitals Section, the Chest Diseases Section, the Ministry of Social Affairs Hygiene Department and the Kafr el Dawar Spinning Company).

As regards the clerical staff, a training centre has been set up at Shubra Ancylostoma Hospital for the training of new clerks in hospital routine work before taking up their duties in the units.

(vi) *Educational Propaganda:*

Ancylostoma units continue their propaganda activities which consist of lecturing their patients, distributing pamphlets and hanging posters in thoroughfares, on doors of mosques, etc.

In addition, the Health Propaganda Section was asked to arrange broadcasts on parasitic diseases and means of protection therefrom.

Efforts were continued to raise the standard of health culture among students of the Sanitary Institute, Health Visitors, pupils of the Nursing Schools, and others, such as pupils of Abdel Aziz Normal School, and the Physical Training Institute. The Ancylostoma Hospital at Fom el Khalig gave lectures with demonstration of specimens of snail vectors, calculi, etc.

V.—*Compulsory Treatment Campaign, Fayoum Province:*

The shortage of M.Os. and the discontinuance of action for lapse of the legal delay in the case of offences against the Compulsory Treatment law were responsible for the interruption of treatment. Hence, proposals were made for the amendment of the law so as to ensure continuance of action.

Moreover, treatment activities had to be further suspended in the units following the outbreak of the cholera epidemic in September of this year and the recruitment of all medical hands for combating the epidemic.

The following is a summary of the work achieved:

(i) The permanent units, *i.e.*

Ancylostoma Hospital No. 4, Fayoum.

„ Hospital No. 18, Sennoures.

„ Hospital No. 15, Ibshaway, and

Ancylostoma Branch at Itsa District Hospital

Routine treatment (voluntary) was continued in these hospitals but all efforts to induce the inhabitants to attend treatment under terms of the compulsory treatment law have failed and it had to be given up.

The following is a statistical summary of the work.

Total number of new patients attending:

Examination and treatment ... ..	31,061
Number of persons whose urine was examined... ..	30,053
Total number of cases returned positive for Bilharzia ...	13,842 ( <i>i.e.</i> 46%)
Number of persons whose stools were examined ... ..	23,078
„ positive for intestinal Bilharzia (lateral spinal):	12
„ positive for intestinal Bilhar. (terminal spinal)	113
„ „ Ancylostoma ... ..	2,773 (12 0/0)
„ „ Ascaris ... ..	1,376 (5.7 0/0)

	1st Treat- ment	2nd Treat- ment	Number Examined	Number Recovered
Total number of doses of carbon tetrachloride ...	859	2	105	103
Total Number of Chenopodium oil ....	2,263	7	118	105
Total Number of Felix Mass ....	49	1	—	—
No. of patients commencing Bilharzia treatment with Tarter Emetic ...	12,122	—	6,274	5,054
No. of patients commencing Bilharzia treatment with Repodral intramuscular injections ...	196	—		
No. of injections given to patients treated with tarter.	105,167	—		
Total No. of injections given to patients treated with Repodral intramuscular injections ...	1,178	—		

(ii) *Ten light units for village treatment :*

Since leaving these units without medical officers and without work served no useful purpose, it was decided to annex them to such District Hospitals as have no *Ancylostoma* Branches and have them replaced by mobile units. Five of these units have actually been transferred during the year.

(iii) *Continuation of laboratory research work in Talaat Village, Fayoum Province.*

Laboratory researches were continued at Talaat Village on the lines adopted last year, i.e. monthly examination of negative persons, and quarterly re-examination of positive patients, already treated. The work was, however, suspended at the end of September, in view of the outbreak of cholera.

(iv) *Charging Laboratory Assistants with the intramuscular injection of patients, as a temporary solution to the question of shortage of Doctors.*

As a solution to the shortage of medical officers, it was decided to charge laboratory Assistants with the intramuscular injection of patients, provided that one M.O. was allotted a number of units, to undertake the clinical examination of the patients, and supervise the work of the Laboratory Assistants.

This procedure has been introduced in the area of Matar Taress health centre (Fayoum), with a population of about 15,000. In consequence, it was decided to speed up treatment by giving successive daily injections.

The result of examination and treatment in that District is summarised hereunder :

TABLE No. 96.

[illegible]

### *Role of the Ancylostoma Units in the Anti-Cholera Campaign:*

Following the outbreak of the cholera epidemic at the end of September 1947, all routine work in ancylostoma units was stopped and their staff and equipment placed at the disposal of Provincial Public Health Inspectors for utilization in the fight against the epidemic. Premises of some of the units were used for the accommodation of cholera cases and others for the segregation of contacts or convalescents. The medical officers played an important role in the management of isolation units, the laboratory assistants undertook inoculation and the *Tamurgis* and *Bashtamurgis* undertook the general inoculation of the population.

## Chapter XVII—MALARIA

### *Blood Specimens:*

Out of a total of 89,138 blood specimens examined this year, 19,346 or 21.7% were returned positive (both new infections and relapses), as against 19% in the last year.

Tables Nos. 99, 100 and 101 give the distribution of these specimens according to their types. The number of persons attending malaria units is highest because they usually suffer from Malaria.

In addition, the Fouad 1st Institute for Tropical Diseases examined blood specimens sent from different localities. Table No. 102 gives details of the results of the examination. Table No. 103 refers to blood specimens examined by malaria branches annexed to Ancylostoma hospitals throughout the Country.

### *New Infections and Relapses:*

Out of 19,346 cases returned positive for malaria, 5,957 cases were considered new infections and 13,389 relapses.

### *Malaria Splenomegaly:*

Table No. 104 gives a splenic index for persons not suffering from malaria and also for persons suffering from benign or malignant malaria.

### *Types of Malaria:*

Tables Nos. 105 and 106 give only two types of malaria (benign and malignant) and percentage of each type related to total specimens examined in Governorates and Provinces provided with Malaria Stations.

### *Monthly Distribution of Malaria:*

Tables Nos. 107 and 108 give the monthly distribution of malaria cases of all types in Lower Egypt and Upper Egypt.

The incidence of benign tertian malaria reached its maximum during October in Lower Egypt and during January in Upper Egypt. The incidence of malignant malaria reached its maximum in Lower and Upper Egypt during October.

### *Malaria Cases reported in Governorates and Provinces during 1946 and 1947:*

Table No. 109, gives the number of malaria cases and deaths reported to the Statistical Department from the Governorates and Provinces during 1946 and 1947. It shows that there were 2515 cases less and 10 deaths more than in 1946.

### *Survey of Mosquito Breeding Places :*

Mosquito breeding places were surveyed by malaria units on the same lines as in previous years. Priority was given to breeding places infected with *Anopheles* mosquito. These were reported to the Public Services Department or other competent departments for disposal. Tables Nos. 110, and 111, give details of the survey work and results thereof.

### *Control Work :*

36 main malaria stations and 74 branch stations were engaged in control work.

Control work by different methods was carried out on the same lines as in the previous year. Table No. 112 gives the kinds and quantities of insecticides consumed.

### *Warnings and Contraventions :*

Besides control work, malaria units supervise the application of the malaria law and contraventions are drawn up for failure to fulfil requirements of these warnings. Judgments were given in certain cases for the removal of the source of offence at the expense of offenders. Table No. 113 gives details of the warnings and contraventions served in Upper and Lower Egypt.

### *Filling in Ponds :*

The Village Affairs Department filled in 310 Birkas of an area of about 419 feddans as shown in table No. 114. Table No. 115 gives details of 10 birkas of an area of about 22 feddans filled in by the local inhabitants under Military Order No. 363 of 1946.

### *Treatment and Drugs :*

Proper malaria treatment was given to cases proved positive by microscopic examination. Table No. 116 gives details of various drugs distributed by malaria units in Lower and Upper Egypt. Treatment is available to malaria patients at all other treating centres throughout the country.

### *Malaria Law No. 1 of 1926 modified by Law No. 78 of 1946 restricting rice and Sugar-cane cultivations :*

During the year, a Ministerial Arrêté dated March 13, 1947, forbidding rice cultivation around Sennouris Bandar was published in the official journal No. 29 dated April 3, 1945. Another Arrêté dated 19 May 1947, was published in the official journal No. 51 of June 9, 1947, suppressing certain provisions of decree No. 108 of 1945.

### *Activity of the Malaria Section during the Cholera Epidemic :*

During the cholera epidemic, the Malaria Section cooperated in the control work as follows :

1.—Spraying an area of 173,036 feddans in Cairo, Alexandria, and 199 villages in Lower Egypt with a 20 % D.D.T. and Velsicol solution by means of type B.T. 13 aircraft of the Farouk Sanitary Squadron. 9,034 gallons of the insecticide were used.

2.—Spraying with 10 % D.D.T. and kerosene solution, 160 villages in Lower Egypt and some quarters of Alexandria with an area of 111,550 feddans by means of two type C. 47 aircraft kindly lent by the U.S.A. Army Command in Western Germany. 900,123 gals. of the insecticide were used.

3.—Spray painting walls of habitations with 5 % D.D.T. and kerosene solution by means of hand sprayers. This work covered 358 villages, 98 isolation hospitals, 171,540 dwellings comprising 586,361 rooms and 734,744 inhabitants besides 64,792 sheds, 1,745 public establishments and 234,560 other places in villages of Lower and Upper Egypt (except Minia and Fayoum). 107,391.12 gals. of the insecticide were used in conjunction with the Insects Eradication Section.

4.—Spraying 7 % D.D.T. and malariol solution through exhaust pipes of specially fitted jeeps. 6,500 galls. of the insecticide were used in spraying 75 villages in Lower and Upper Egypt and suburbs of Cairo.

5.—Fly control by setting up nine posts at the entrances of Cairo City for the purpose of spraying with insecticides all vehicles entering the City. A total of 37,072 vehicles were sprayed with 110 gallons of insecticide.

*Larvae control in rice cultivations by aircraft :*

It is proposed to control anopheles larvae in large rice and sugar-cane cultivations by means of aircraft of Farouk Sanitary Squad prior to lifting up restrictions on cultivation of aqueous plants in the proximity of large towns since rice and sugar cane represent two of the principal crops of the country.

*The Anti Mosquito Campaign in Fayoum :*

The campaign has well executed its program by painting houses with 5 % D.D.T. in kerosene and muddy houses with 5 % D.D.T. in malariol.

At the beginning of 1947, it was decided to organize the work on the following basis.

1.—Maintenance of larvae control in water stretches in the three areas (Fayoum, Abshaway and Sennouris) using D.D.T. and malariol on eradication basis.

2.—Selection of an isolated locality in the Province to spray-paint its houses with 5 % D.D.T., and kerosene solution on a large scale. The western area of the Province was chosen for this purpose.

3.—Taking special interest in adult mosquito survey in areas where larvae control is in progress.

4.—Maintenance of survey in the Province for another year in order to study the stages and extent of spread of mosquitoes.

5.—Dissection of mosquitoes in order to determine the principal mosquito carrier of the malaria parasite in the Fayoum Province.

*Larvae Control :*

Larvae control started in the districts of Fayoum, Abshaway and Sennouris, the first being divided into 3 groups, the others into 2 groups each. 3 supervisors, 7 surveyors and 31 overseers were engaged. The distribution of the darakat (zones) in each area was as following :

Area	No. of Overseers	No. of Labourers	No. of Darakat
Fayoum ... ..	12	12	12
Sennouris ... ..	10	10	10
Abshaway ... ..	9	9	9

Paris Green was used in larvae control in Sennouris and Abshaway. But in Fayoum, a 5 % D.D.T. and malariol solution was used.

10,177,929 units were controlled by paris green in Masloub and Abgig (Sennouris, Abshaway) consuming, 1,420.250 kgs, till the end of May 1947.

7,025,598 units were controlled in Abshaway from June till September 1947, consuming 997.640 kgs. of paris green.

In Fayoum and Sennouris 6,799,390 units were controlled from January till June 1947 consuming 3,570.700 litres of 5 % D.D.T. and malariol solution.

Experiments on larvae control with D.D.T emulsion were carried out in Beni Osman (Sennouris) and Abgig (Fayoum) during the period from June till September 1947.

10,147,253 units were controlled with this emulsion which proved ineffective since its particles immediately precipitated in the breeding places.

### *Adult Mosquito Control:*

Adult mosquito control was started on February 23rd. 1947, by spray painting houses and villages within a radius of 4 kilometers of Bandar Fayoum by a 5 % D.D.T. and kerosene solution. On May 9th. 1947, 5,484 houses with 28,724 rooms were spray painted consuming 70,820 litres of the insecticide.

Work was begun on May 11th. in the north west area of the Province. 25 villages including 1,872 houses with 9,641 rooms were spray painted consuming 26,496 litres of a 5 % D.D.T. emulsion.

Thus a total of 209 villages and Ezbas with 13,900 houses consisting of 67,616 rooms were spray painted with the solution around Bandar Fayoum and in the north west area. 165,936 litres of D.D.T. and kerosene solution were consumed.

1,872 houses with 9,641 rooms were spray painted with the emulsion consuming 26,496 litres.

The campaign had then to be stopped following the outbreak of the cholera epidemic and the engagement of all units in its control.

### *Results of larvae control:*

The infestation ratio during the last six months of 1946 fell from 6 % to 3 % as a result of using paris green. During the period from January to April 1947, it fell to 1.5 % and then to 0.4 % and 0.3 % in May, June and July respectively following the use of 5 % D.D.T. and malariol.

### *Results of adult mosquito Control:*

Survey revealed that the infestation ratio in houses during the last six months of 1946. was 33 %

As a result of examination of the painted houses round Bandar Fayoum till May 8, 1947, for adult mosquitoes, one specimen of culex was captured on March 30th 1947 at Ezbit Ahmed Nagi in darak No. 122. The result of re-examination of the above mentioned area carried on June 10th. 1947, was negative.

Examination of houses round and to the north west of Bandar Fayoum during May, June and July i.e. some 8 weeks after spray painting revealed that the infestation ratio was 0.3 %. It is concluded that effective D.D.T. spray painting lasts eight weeks on the average.

### *Mosquito control in Cairo:*

Mosquito control in Cairo was carried out on the same lines as in previous years. The number of darakats was increased to 85 as against 75 in the previous year, distributed among 9 districts having 109,314 houses. 29,446 of these houses are connected to the main drainage system and the rest are drained into private cesspits as follows.

TABLE No. 97

District	Location	Number of Darakat		Conncted to public Drains	Drained in private cesspits	TOTAL
		Houses	Farms			
Shubra ... ..	2. Haret Mohamed Ahmed, Sh. Ibn el Rashid ... ..	12	1	16,884	8,069	249,520
El Zaher ... ..	24, Sh. Zaki Bey ... ..	12	3	13,347	8,591	21,938
Fom el Khalig ... ..	Sh. Saad Zaghloul ... ..	12	—	11,011	5,747	15,758
Darb el Ahmar: ...	14, Haret El Nassra, El Yakania ...	10	—	11,916	4,124	16,040
Imam el Shafie ... ..	Sh. Kamel Mohsen ... ..	2	—	—	—	—
Zeitoun ... ..	Sh. El Asatin ... ..	7	1	6,320	1,832	8,159
Maadi ... ..	Fire Brigade Station ... ..	5	2	6,338	80	6,418
Helwan ... ..	Sh. Abd el Rahman Pasha. ... ..	3	1	7,306	—	2,306
Giza ... ..	Sh. Fouad, Fire Brigade Building ...	8	—	7,200	543	7,746
Imbaba ... ..	Sh. Hassan Yosri, El Kharta el Gedida.	6	—	4,539	460	4,999
TOTAL ... ..		77	8	79,868	29,446	109,314

Each septic tank was sprayed with 25 c.cs. of malariol weekly. Warnings were served on owners for lacking sanitary requirements imposed under malaria Law No. 1 of 1926. In the case of failure, the source of the offence was removed at the expense of offenders. The Cairo Health Department took action against overflowing cesspits.

Breeding places are examined periodically and, in the case of infestation, are sprayed with a 5 % D.D.T. and malariol solution or paris green. Some 22 tons and 976 kgs. of D.D.T. in malariol, 66 tons and 968 kilogrammes of malariol and 11 tons and 518 kgs of D.D.T. emulsion were consumed.

As a result of the Nile flood, seepage water appeared in some places in Cairo with an area of 43 feddans and 6 kirats. These were larvicided until they dried up.

During the month of September, this branch took an active part in the fight against the cholera epidemic in Cairo and the provinces.

In December, two gangs were formed for fly control in Cairo composed of 2 supervisors, 2 controllers, 24 overseers, 63 labourers and one mechanic.

The following table No. 98 shows the total houses spray painted with 5 % D.D.T. and kerosene solution during December.

TABLE No. 98

No. of Houses	No. of Rooms	No. of Inhabitants	No. of Public establishment	No. of Sheds	No. of stables	Other Places	Quantity of insecticide consumed	
							Tons	Kils
17,858	48,489	121,429	4,575	832	366	20,032	38	500

*Propaganda :*

Propaganda activities were carried out in conjunction with those of the Health Propaganda Section. Every means is employed to explain to the inhabitants the symptoms of malaria, causes of its spread, how the disease is contracted and methods of protection and treatment.

*Complaints :*

All complaints forwarded to the Section or its units received due consideration and the cause of the complaints removed.

TABLE NO. 99.—DISTRIBUTION OF BLOOD FILMS EXAMINED FOR LOWER EGYPT  
AND SUEZ GOVERNORATE DURING 1947

Category	No. of specimens	Positive		Total	Rate Percent
		New	Relapse		
(1) Attendance at Malaria Units	34,756	5,539	7,654	13,193	38
(2) Suspected Persons at their homes ... ..	2,912	258	504	762	26.1
(3) General examination... ..	1,288	13	43	56	4.3
TOTAL ... ..	38,956	5,810	8,201	14,011	35.9

TABLE NO. 100.—DISTRIBUTION OF BLOOD FILMS EXAMINED FOR UPPER EGYPT  
AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1947

Category	No. of specimens	Positive		Total	Rate Percent
		New	Relapse		
(1) Attendance at Malaria Units	15,043	147	4,134	4,281	28
(2) Suspected Persons at their homes ... ..	22,165	—	1,021	1,021	4.6
(3) General examination ... ..	12,974	—	33	33	6
TOTAL ... ..	50,182	147	5,188	5,335	10.6

TABLE NO. 101.—GENERAL DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA  
IN EGYPT DURING 1947

Category	No. of specimens	Positive		Total	Rate Percent
		New	Relapse		
(1) Attendance at Malaria Units	49,799	5,686	11,788	17,474	35
(2) Suspected Persons at their homes ... ..	25,077	258	1,525	1,783	7.1
(3) General examination ... ..	14,262	13	76	89	0.6
TOTAL ... ..	89,138	5,957	13,389	19,346	21.7

TABLE No. 102.—NUMBER OF SPECIMENS EXAMINED FOR MALARIA  
BY RESEARCH INSTITUTE DURING 1947

Category	No. of Blood specimens	Positive Malaria			All positive	Rate per cent
		Benign	Malignant	Mixed infection		
(1) Specimens from Hosp. ...	827	112	3	—	115	14
(2) Specimens from Malaria stations and outposts ...	14,493	935	32	—	967	6.7
(3) Specimens from Ancylostoma Units ... ..	900	198	17	1	216	35.1
TOTAL ... ..	16,220	1,245	52	1	1,298	8

TABLE No. 103.—NUMBER OF SPECIMENS EXAMINED BY MALARIA UNITS ATTACHED  
TO ANCYLOSTOMA HOSPITALS IN EGYPT DURING 1947

Ancylostoma Units	Pop. 1947	No. of Blood Specimens	No. of Positive Malaria cases	Rate Percent	Ben. Tert		Malig. Tert.	
					New	Relap.	New	Relap.
Suez... ..	98,508	428	39	9	3	23	1	12
Dessouk ... ..	23,992	5,520	2,406	43	1,662	395	302	47
Fowa ... ..	18,975	5,306	3,275	61.7	9	2,119	6	1,141
Kafr el Sheikh ... ..	15,508	4,276	1,505	35.1	669	745	34	57
Zagazig ... ..	82,912	278	53	19	42	8	3	—
Faccous ... ..	16,263	239	101	41	75	25	1	—
Benha ... ..	35,245	780	133	17	78	51	4	—
Fayoum ... ..	72,465	1,740	439	25.3	153	195	48	42
Beni Suef ... ..	56,356	668	18	2.6	13	—	5	—
TOTAL ... ..	430,224	19,235	7,969	41.5	2,704	3,561	404	1,300

TABLE No. 104.—MALARIA AND ENLARGEMENT OF THE SPLEEN IN UPPER  
AND LOWER-EGYPT DURING 1947

Province or Governorate	Name of Station	Persons non infected with malaria			Persons infected with Benig. T. malaria			Persons infected with Malignant. T. Malaria		
		No.	Positive	Rate %	No.	Positive	Rate %	No.	Positive	Rate %
Western Desert...	Wadi el Nat- roun... ..	550	300	54.5	395	320	81	19	19	10
	Baharia Oasis	10	4	40	9	7	80	4	3	75
Behera... ..	Idko ... ..	3,376	116	3.4	3,553	178	5	—	—	—
Sharkia ... ..	Zagazig ...	—	—	—	183	78	42.6	—	—	—
	Abu Kebir	421	15	3.6	110	110	100	—	—	—
TOTAL ... ..	Lower Egypt.	4,357	435	9.7	4,250	693	16	23	22	88
Giza ... ..	Giza ... ..	15	6	40	—	—	—	—	—	—

TABLE No. 105.—DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES  
IN LOWER-EGYPT AND THE CANAL GOVERNORATE DURING 1947

Province or Governorate	Total of Specim- ens	Total of Posit. Cases	Rate per cent	Benign Tertian				Malignt Tertian			
				No.	New	Relapse	Rate per cent	No.	New	Relapse	Rate Per cent
Canal ... ..	2,507	84	3.3	44	24	20	1.7	40	27	13	1.6
Western Desert ...	2,044	428	21.2	405	9	396	19.8	23	2	21	1.4
Behera ... ..	8,362	3,830	46	3,824	196	3,628	46	6	2	4	0.07
Gharbia ... ..	4,408	2,040	46.2	2,034	819	1,215	46.1	6	6	—	0.13
Menoufia... ..	617	91	14.7	91	91	—	14.7	—	—	—	—
Dakahlia.... ..	8,795	2,992	34	2,941	1,736	1,205	33.4	51	17	34	0.6
Sharkia ... ..	9,889	3,656	36.9	3,549	2,473	1,076	35.8	107	35	72	1.08
Kalubia ... ..	2,334	890	38.1	871	367	504	37.4	19	6	13	0.7
TOTAL ... ..	38,956	14,011	35.9	13,759	5,715	8,044	35.3	252	95	157	0.6

**TABLE NO. 106.—DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT  
AND THE SOUTHERN DESERT GOVERNORATE DURING THE YEAR 1947**

Province or Governorate	Total of Specimens	Total of Posit. Cases	Rate percent	Benign Tertian				Malignt Tertian			
				No.	New	Relapse	Rate per cent	No.	New	Relapse	Rate Per cent
Giza ... ..	3,241	128	3·9	126	—	126	3·8	2	—	2	0·06
Fayoum ... ..	8,346	3,529	42·2	3,382	120	3,262	40·5	147	4	143	1·7
Beni Suef ... ..	43	6	13·4	6	4	2	13·9	—	—	—	—
Minia ... ..	377	24	6·3	23	1	22	6·1	1	—	1	0·2
Assiut ... ..	48	8	16·6	8	8	—	16·7	—	—	—	—
Gerga ... ..	2,086	79	3·8	36	—	36	1·7	43	—	43	2·7
Qena ... ..	24,450	127	0·5	125	—	125	16·5	2	—	2	·008
Aswan ... ..	6,505	1,343	20·6	1,312	—	1,311	20·5	32	—	32	0·5
Southern Desert ...	5,086	91	1·7	81	10	71	1·5	10	—	10	0·2
<b>TOTAL ... ..</b>	<b>50,182</b>	<b>5,335</b>	<b>10·7</b>	<b>5,098</b>	<b>143</b>	<b>4,955</b>	<b>10·2</b>	<b>237</b>	<b>4</b>	<b>233</b>	<b>0·4</b>

**TABLE NO. 107.—MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES  
IN LOWER EGYPT AND THE CANAL AND SUEZ GOVERNORATES DURING 1947**

Months	Total of Specimens	Total of Positive	Rate Percent	Benign Tertian				Malignant Tertian			
				No.	New	Relap.	%	No.	New	Relap.	%
January ... ..	1,252	223	17·8	206	53	153	16·5	17	9	8	0·95
February ... ..	1,040	165	15·8	153	26	127	14·7	12	4	8	1·1
March ... ..	1,400	230	16·4	221	57	164	15·7	7	2	7	0·64
April ... ..	2,022	565	27·9	558	137	421	27·6	7	1	6	0·34
May ... ..	3,093	1,094	35·3	1,083	413	470	35	11	4	7	0·35
June ... ..	4,254	1,534	36·0	1,525	460	1,065	35·8	9	1	8	0·21
July ... ..	6,397	2,476	38·7	2,454	994	1,460	38·3	22	4	18	0·34
August ... ..	8,150	3,120	38·2	3,087	1,543	1,544	37·8	33	13	20	0·4
September ... ..	7,843	3,346	42·6	3,261	1,814	1,417	41·5	85	38	47	1·08
October ... ..	1,315	638	48·5	615	168	447	46·7	23	16	7	1·7
November ... ..	530	250	47·1	242	2	240	45·6	8	—	8	1·5
December ... ..	1,660	370	22·2	354	48	306	21·3	16	3	13	0·96
<b>TOTAL ... ..</b>	<b>38,956</b>	<b>14,011</b>	<b>35·9</b>	<b>13,759</b>	<b>5,715</b>	<b>8,044</b>	<b>35·2</b>	<b>252</b>	<b>95</b>	<b>157</b>	<b>0·64</b>

TABLE No. 108.—MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES  
IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE DURING 1947

Months	Total of Speci- mens	Total of Positive	Rate Per cent	Benign Tertian.				Malignant Tertian			
				No.	New	Relap.	%	No.	New	Relap.	%
January ... ..	4,038	628	15·5	609	1	608	0·15	19	—	19	0·47
February... ..	3,449	292	8·4	266	3	26	7·7	26	—	26	0·75
March ... ..	3,837	337	8·7	316	7	309	8·0	21	—	21	0·54
April ... ..	5,750	345	6·0	338	3	335	5·9	7	—	7	0·12
May ... ..	4,561	410	8·9	408	8	400	8·9	2	1	1	0·04
June ... ..	4,679	703	15·1	682	25	657	14·6	21	—	21	0·44
July ... ..	4,596	526	11·4	507	24	483	11·0	19	—	19	0·41
August ... ..	4,556	674	14·7	654	26	628	14·3	20	1	19	0·43
September ... ..	5,859	834	14·2	779	23	756	13·2	55	2	53	0·93
October ... ..	3,363	316	9·3	279	9	270	8·2	37	—	37	1·1
November ... ..	2,310	104	4·5	102	14	88	4·4	2	—	2	0·08
December ... ..	3,184	166	5·2	158	—	158	4·9	8	—	8	0·3
TOTAL ... ..	50,182	5,335	10·6	5,098	143	4,955	10·15	237	4	233	0·47

TABLE No. 109.—NUMBER OF MALARIA CASES AND DEATHS NOTIFIED DURING 1946-1947

Province or Governorate	1946		1947		Difference		Malaria Relapses 1947	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cairo ... ..	212	2	434	7	+ 222	+ 5	120	—
Alexandria ... ..	208	5	209	5	+ 1	—	—	—
Other Governorates ...	544	3	443	1	— 101	— 2	27	—
Behera ... ..	2,410	1	2,659	2	+ 249	+ 1	—	—
Dakahlia ... ..	485	—	126	—	— 359	—	1	—
Gharbia ... ..	2,148	—	970	3	— 1,178	+ 3	489	—
Menoufia... ..	63	—	73	—	+ 10	—	2	—
Sharkia ... ..	683	2	473	6	— 210	+ 4	3	—
Kaliubia ... ..	626	1	714	2	+ 88	+ 1	13	—
Giza ... ..	109	—	100	2	— 9	+ 2	—	—
Fayoum ... ..	1,622	3	361	2	— 1,261	— 1	2,708	—
Beni Suef ... ..	34	1	10	1	— 24	—	—	—
Minia ... ..	52	—	49	—	— 3	—	—	—
Assiut ... ..	4	—	5	—	+ 1	—	1	—
Gerga ... ..	25	1	20	1	— 5	—	—	—
Qena ... ..	8	3	5	—	— 3	— 3	—	—
Aswan ... ..	29	—	96	—	+ 67	—	—	1
<b>TOTAL ... ..</b>	<b>9,262</b>	<b>22</b>	<b>6,747</b>	<b>32</b>	<b>— 2,515</b>	<b>+ 10</b>	<b>3,365</b>	<b>1</b>



**TABLE NO. 111.—NUMBER OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING  
EITHER LARVA OF ANOPHELES, CULEX PIPIENS OR BILHARZIAL SNAILS IN UPPER EGYPT DURING 1947**

Province or Governorate	Station	No. of Villages Surveyed	No. of birkas examined	Positive Birkas for larvae		Birkas harbouring Anopheles Larvae								Birkas harb Culex Pipiens	
						Pharoen.		Mult		Sergenti					
				No.	%	No	%	No	%	No	%	No.	%	No.	%
Giza ... ..	Giza ... ..	65	228	193	84	65	28.4	—	—	—	—	128	56.1		
Beni Suef ... ..	Beni Suef ... ..	6	28	25	83	5	27.5	2	11.5	—	—	8	44		
Minia ... ..	Minia ... ..	20	2	27	84.3	27	84.3	—	—	—	—	—	—		
Assiut ... ..	Assiut ... ..	—	—	—	—	—	—	—	—	—	—	—	—		
Qena ... ..	Nag Hamadi ...	9	168	60	35	60	35	—	—	—	—	—	—		
	Qena ... ..	1	12	5	41	2	15.6	—	—	3	5.4	—	—		
	Luxor ... ..	4	188	26	14	26	13.6	—	—	—	—	—	—		
Aswan ... ..	Edfu ... ..	6	6	6	100	6	100	—	—	—	—	—	—		
TOTAL ... ..		111	652	332	50	191	295	2	0.31	3	0.46	136	40.9		

TABLE No. 112.—QUANTITIES OF LARVICIDE CONSUMED DURING 1947  
IN LOWER AND UPPER EGYPT

Province or Governorate	Station	Quantities Consumed		
		Paris Green	D.D.T. with Malariol	Mazut
		Kgrs.	Kgrs.	Kgrs.
<b>Lower Egypt :</b>				
Canal ... ..	Ismailia ... ..	1,328	—	—
	Suez ... ..	1,085.030	—	—
Western Desert	Siwa ... ..	170.000	—	—
	Baharia Oasis ... ..	87.066	—	—
Behera ... ..	Idku ... ..	1,827.420	1,000	350
	Kafr el Dawar ... ..	306.465	—	2,430
	Damanhour ... ..	643.275	—	—
Gharbia ... ..	Fowa ... ..	163.000	—	—
	Kafr el Sheikh ... ..	851.500	—	—
	Biala ... ..	404.310	—	400
	Desouk ... ..	704.975	—	—
	Mehalla el Kobra ... ..	139.000	—	—
Dakahlia ... ..	Faraskour ... ..	958.520	—	—
	Dekernis ... ..	466.752	—	—
Sharkia ... ..	Belbeis ... ..	1,108.000	—	—
	Inshas ... ..	855.980	72	—
	Abu Kebir ... ..	269.500	262	—
Menoufia... ..	Shebin el Kom ... ..	612.000	—	—
Kaliubia ... ..	Toukh ... ..	1,355.019	3,356	—
	<b>TOTAL ... ..</b>	<b>13,335.122</b>	<b>4,690</b>	<b>3,180</b>
<b>Upper Egypt :</b>				
Giza... ..	Giza ... ..	105.000	23,581	4,972
Beni Suef ... ..	Beni Suef ... ..	251.460	2,295	—
Minia ... ..	Minia ... ..	2,201.706	—	—
Assiut ... ..	Assiut ... ..	350.843	—	—
Gerga ... ..	Souhag ... ..	373.495	—	—
	Gerga ... ..	389.400	—	—
Qena ... ..	Nag' Hammadi... ..	1,021.000	—	—
	Qena ... ..	931.562	—	—
	Luxor ... ..	350.000	—	—
	Mata'na ... ..	292.500	—	312
Aswan ... ..	Kom Ombo ... ..	2,125.175	—	—
	Idfu ... ..	686.000	—	—
	Aswan ... ..	718.760	—	—
	<b>TOTAL ... ..</b>	<b>9,798.901</b>	<b>25,876</b>	<b>5,284</b>

**TABLE NO. 113.—NUMBER OF WARNINGS AND P.Vs. OF CONTRAVENTION DRAWN UP BY  
MALARIA UNITS AND THEIR BRANCHES IN UPPER AND LOWER EGYPT DURING 1947**

Province or Governorate	Unit	Burrow Pits or Puddles		Filling in or covering over disused wells or sakias & Aboli- shing pumps		Clearing Drains or miskas		Clearing Ponds or Marshes		Prohibition of Rice and Sugar cane Cultivations	
		Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs
Canal ...	Ismailia ...	2	—	—	—	162	6	—	—	—	—
	Suez ...	—	—	—	—	58	—	—	—	—	—
Western Desert ...	W. el Natrun	—	—	—	—	—	—	—	—	—	—
	Siwa ...	—	—	—	—	—	—	—	—	—	—
	Baharia Oasis	—	—	—	—	—	—	—	—	—	—
Behera ...	Kafr el Dawar	6	1	1	—	19	4	—	—	—	—
	Idku ...	—	—	—	—	94	27	—	—	—	17
	Damanhour	—	—	—	—	10	—	15	—	—	492
Gharbia ...	Dessouk ...	—	—	—	—	—	—	—	—	—	—
	Fowa ...	—	—	—	—	—	—	—	—	—	—
	Kafr el Shiek.	—	—	—	—	—	—	—	—	—	—
	Biala ...	—	—	2	—	16	5	1	—	—	—
	Mehalla el Ko- bra ...	—	—	—	—	—	—	—	—	—	146
Menoufia...	Shebin el Kom ...	—	—	—	—	—	—	—	—	—	—
Sharkia ...	Belbeis ...	—	—	—	—	—	—	—	—	—	—
	Inshas ...	—	—	—	—	—	—	—	—	—	—
	Abu Kebir	—	—	—	—	3	—	—	—	—	—
Dakahlia...	Faraskour ...	—	—	6	—	66	7	—	—	—	—
	Dekernis ...	—	—	—	—	—	—	—	—	—	147
Kaliubia...	Toukh ...	—	—	4	3	—	—	—	—	—	4
	<b>TOTAL ...</b>	<b>8</b>	<b>1</b>	<b>13</b>	<b>3</b>	<b>428</b>	<b>49</b>	<b>16</b>	<b>—</b>	<b>—</b>	<b>806</b>
Giza ...	Giza ...	—	—	—	3	—	—	—	—	—	—
Fayoum	Fayoum ...	—	—	3	—	—	—	—	—	—	131
	Abshaway ...	—	—	—	—	32	—	—	—	—	—
Beni Suef ...	Beni Suef ...	—	—	—	—	—	—	—	—	—	—
Minia ...	Minia ...	—	—	—	—	9	—	5	—	—	—
Assiut ...	Assiut ...	1	—	1	—	—	—	—	—	—	—
Qena ...	Qena ...	1	—	—	—	—	—	—	—	—	—
Aswan ...	Aswan ...	—	—	—	—	—	—	—	—	—	—
	<b>TOTAL ...</b>	<b>2</b>	<b>—</b>	<b>48</b>	<b>3</b>	<b>41</b>	<b>—</b>	<b>5</b>	<b>—</b>	<b>—</b>	<b>131</b>

TABLE NO. 114.—DETAILS OF BIRKAS FILLED IN BY THE VILLAGE AFFAIRS DEPARTMENT  
DURING THE FISCAL YEAR 1947-1948

Province or Governorate	Markaz	No. of Birkas	Approximate Area			Cubic Metres	Costs	
			Fedd.	Kirat	Sahm		L.E.	Mills.
Gharbia ...	Kafr el Zayat ...	18	32	20	3	204,000	36,516	—
	Fowa ...	7	16	6	10	54,000	9,076	—
	Kallin ...	11	17	10	15	65,000	10,920	—
	Dessouk ...	1	1	5	3	3,500	588	—
	Samannoud ...	2	1	7	23	4,000	672	—
	Tanta ...	7	6	2	3	16,000	2,688	—
	Santa ...	6	12	3	1	65,000	9,160	—
Dakahlia ...	Aga ...	7	25	14	—	167,000	28,933	—
	Dekernis ...	10	16	23	—	93,500	18,139	—
	Sinbellawein ...	5	5	11	—	13,000	2,522	—
Sharkia ...	Minia el Kamh...	5	6	10	—	15,000	2,220	—
	Belbeis ...	5	15	23	6	20,000	3,680	—
Kaliubia ...	Toukh ...	24	57	22	21	385,000	56,345	—
Menoufia...	Menouf ...	66	71	21	9	411,000	73,059	600
	Shebin el Kom ...	4	6	9	11	65,000	10,839	—
	Quesna ...	7	23	13	7	135,000	21,870	—
Giza ...	Imbaba ...	22	18	1	22	59,869	8,958	612
	Giza ...	18	14	14	18	77,000	13,475	—
	Ayat ...	7	4	8	6	12,000	1,776	—
Beni Suef ...	Beni Suef ...	8	13	13	15	33,000	6,402	—
	Beba ...	3	2	5	17	10,000	1,920	—
Fayoum ...	Itsa ...	3	2	15	20	7,500	1,470	—
	Sennouris ...	1	—	20	—	2,000	360	—
	Abshaway ...	2	1	4	7	5,000	900	—
Minia ...	Bani Mazar ...	12	10	21	9	37,000	6,212	—
Assiut ...	Badari ...	44	30	5	1	166,000	30,350	—
	Manfalout ...	5	6	19	21	55,000	7,700	—
GRAND TOTAL ...		310	419	12	8	2180,369	366,741	212

TABLE NO. 115.—BIRKAS FILLED IN BY THE INHABITANTS DURING 1947 UNDER PROVISIONS OF  
MILITARY ORDER NO. 363 ISSUED ON JANUARY 19, 1943

Province or Governorate	Station	Locality	No. of Birkas	Approximate Area		
				Fedds.	Kirat	Sahm
Canal ... ..	Ismailia ... ..	Ismailia ... ..	—	—	—	—
	„ ... ..	Abu Sultan ... ..	1	12	12	—
	„ ... ..	Nafisha ... ..	1	—	12	—
	Suez ... ..	Suez ... ..	—	—	—	—
	„ ... ..	Shalloufa ... ..	1	—	3	—
Sharkia ... ..	Abu Kebir ... ..	Abu Kebir ... ..	5	5	8	—
			8	18	11	—
			2	4	—	—
Beni Suef ... ..	Beni Suef ... ..	Beni Atia ... ..	2	4	—	—
Minia ... ..	Minia ... ..	Minia ... ..	—	—	—	—
			2	4	—	—

TABLE NO. 116.—QUANTITIES OF DIFFERENT DRUGS CONSUMED FOR TREATMENT  
OF POSITIVE CASES IN UPPER AND LOWER EGYPT DURING 1947

Drugs	Drugs Consumed		GRAND TOTAL
	Lower Egypt	Upper Egypt	
Atebrine ... ..	168,919	511,929	680,848
Quinin 5 grs. ... ..	43,161	4,868	48,029
„ 2 „ ... ..	14,547	4,171	18,718
„ Chocolate ... ..	8,449	20,821	29,270
Plasmochine L. Comp. I cm. ... ..	2,616	82	3,098
„ Cm Comp. ½ cm. ... ..	864	273	1,137
„ simple ... ..	—	—	—
Blaud's Pills ... ..	33,995	216,897	250,892
Mabakrine ... ..	16,210	—	16,210

## Chapter XVIII—INSECTS ERADICATION

This section was engaged during the whole period of 1947 in the process of eradicating *An. sergenti* from the Dakhla and Kharga Oases which started early in the previous year.

It is anticipated that eradication will be complete by the end of 1948. Then a complete report covering the whole period will be issued.

## Chapter XIX—BILHARZIA SNAIL DESTRUCTION

### I.—INTRODUCTION

The Bilharzia Snail Destruction Section, while continuing snail control in Fayoum, Giza and Aswan Provinces and the Oases of the Lybian Desert, has extended its activities to 3 new provinces, Qena, Kaliubia and the southern portion of Behera.

### II.—PROGRESS OF THE WORK IN THE FAYOUM

Table No. 117 compares the surveys in the Province since the beginning of our campaign :

TABLE NO. 117.—SURVEYS IN FAYOUM PROVINCE, 1942-1947

Year	Number of Streams			Lengths in Kms		Dips in Infested Streams	<i>Bulinus</i> Dipped Out	<i>Bulinus</i> In 100 Dips
	Surveyed	Infested	Ratio	Surveyed	Infested			
1942... ..	27,370	6,806	25%	—	4,618	—	—	—
1943... ..	45,234	5,318	12%	—	3,588	—	—	—
1944... ..	92,241	7,263	8%	—	5,009	116,513	37,376	32
1945... ..	139,723	5,706	4%	—	4,365	107,759	21,808	20
1946... ..	141,744	2,785	2%	28,318	2,621	73,129	8,876	12
1947... ..	151,957	3,846	2.5%	32,756	2,583	98,014	9,648	10

The slight increase in the number of streams surveyed and infested is due to the inclusion of new streams in recently reclaimed lands which had never been treated before, but the snail infestation in the Province has been well reduced.

### III.—PROGRESS OF THE WORK IN GIZA PROVINCE

The Province was further subdivided and treatment was intensified. This year more canals were treated, *i.e.* all having more than 2 snails in 100 dips and also a greater number of drains. A more accurate survey revealed a greater number of lightly infested streams but the intensity of snail infestation in the Province as a whole has been reduced by half. Table No. 118 gives the results in the canals of the Province since the beginning of the campaign.

TABLE NO. 118.—SURVEYS IN THE CANALS OF GIZA PROVINCE, 1943-1947

Year	Number of Streams			Lengths in Kms		Dips in Infested Streams	<i>Bulinus</i> Dipped Out	<i>Bulinus</i> In 100 Dips
	Surveyed	Infested	Ratio	Surveyed	Infested			
1943... ..	4,111	1,616	39%	—	1,743	21,571	12,698	60
1944... ..	10,934	2,040	19%	—	1,455	56,983	23,781	42
1945... ..	12,978	2,010	15%	5,233	1,626	57,611	15,556	27
1946... ..	14,754	1,811	12%	4,497	1,533	53,730	13,559	26
1947... ..	17,135	2,720	15%	5,090	2,048	187,629	25,312	13

#### IV.—PROGRES OF THE WORK IN THE OASES

##### 1.—*Baharia Oasis* :

From 66 wells harbouring *Bulinus* at the rate of 86 in 100 dips in 1946 only 5 wells now remain infested at the rate of 44 *Bulinus* in 100 dips. The number of wells infested with *Limnaea cailliaudi*, the vector of the liver fluke of cattle, has been reduced from 155 to 72 and the intensity of infestation from 180 to 70 *Limnaea* in 100 dips.

##### 2.—*Dakhla Oasis* :

The wells and streams of 8 villages have been surveyed and treated bi-annually for the past 2 years. Due to difficulties in sulphation last year, the number of wells infested with *Bulinus* which had been reduced to 13 rose to 20. A complete re-survey of the Oasis also revealed heavy infestations with *Limnaea cailliaudi* and the occurrence of both species of snails in several new villages. In the light of these findings the Oasis was divided into 4 regions with a permanent staff of workers.

##### 3.—*Kharga Oasis* :

From 14 wells infested in the first survey of 1946 with either one or both species of snails, 7 still remain infested at the beginning of 1947.

#### V.—PROGRESS OF THE WORK IN ASWAN PROVINCE

##### 1.—*Kom Ombo Region* :

During 1946 the number of *Bulinus* in 100 dips was lowered from 101 to 28 in the region as a whole. Unfortunately we were unable to sulphate the main stream of the Kom Ombo Company's estate, Cassel Canal, which is heavily infested with snails. We treated this stream by palm-leaf traps and removed 18,393 snails between January 1946 and May 1947.

##### 2.—*Edfu Region* :

Infested lengths have been reduced and infestation with *Bulinus* was lowered from 67 to 31 in 100 dips.

#### VI.—EXTENSION OF THE WORK TO QENA PROVINCE

In Autumn 1946 the Section began a preliminary survey of the perennial areas of the Province, about 73,000 feddans, which are at the northern and southern ends of the Province, while the central part, which is under basin irrigation, has not been considered in our program.

The two perennial regions, Armant, in the south, and Farshout, in the north, were found infested with *Bulinus* snails. These regions were further subdivided and partially treated. The figures for the first survey of 1947 are given in Table No. 119

TABLE NO. 119.—SHOWING THE RESULTS OF THE FIRST COMPLETE SURVEY IN THE PERENNIAL CANALS AFTER PARTIAL TREATMENT, QENA PROVINCE, 1947

Region	Surveyed		Infested		Ratios		Dips in Infested Streams	<i>Bulinus</i> Dipped Out	<i>Bulinus</i> In 100 Dips
	Numbers	Length in kms	Numbers	Length in kms	Numbers	Lengths			
					%	%			
Armant ...	1,810	843	212	228	12	27	6,808	2,483	36
Farshout ...	7,674	1,671	1,214	726	24	53	24,705	24,705	64

#### VII.—EXTENSION OF THE WORK TO KALIUBIA PROVINCE.

The survey of the Province was begun in February 1946 and most of the Province, i.e. 223,000 Feddans were covered during the year. The territory was divided into 4 Regions: 1. Materia, 2. Kaliub, 3. Shebin el Kanater, 4. Benha.

Both species of bilharzia snails are found in the streams of the Province and  $\frac{1}{4}$  of the number or  $\frac{1}{2}$  of the lengths surveyed are infested. *Bulinus* is generally prevalent, occurring in about 95 % of the infested canals and drains. *Planorbis* occurs in about 30 % of the streams; they are localized in the slow waters of the lower central portion of the Province. On the average the snail infestation in infested streams is about 40 snails in 100 dips but in certain areas it is as heavy as 150 snails in 100 dips.

#### VIII.—EXTENSION OF THE WORK TO BEHERA PROVINCE

The section began work in the southern part of the Province in 1946 covering 239,120 feddans which were divided into 4 regions: 1. Kom Hammada, 2. Delingat, 3. Itiay el Barud, 4. Shubrakhit. About 60 % of the total lengths surveyed were found heavily infested with either species of bilharzial snails. 80 % of the infested streams harboured *Bulinus* and 55 % *Planorbis*. Snail infestation was heavy, on the average 65 *Bulinus* in 100 dips and 96 *Planorbis* in 100 dips, the intensity of infestation being higher in drains. In certain areas it reaches 375 snails in 100 dips.

#### IX.—LABORATORY WORK AND RESEARCH

Studies were made on the following:

1.—The experimental infection of laboratory-bred South African and Venezuelan vector snails with human bilharzia miracidia of Egyptian strain.

(a) *Physopsis africana*.—Infection with *B. haematobia* was successful whereas that with *B. mansoni* failed.

(b) *Bulinus tropicus*.—Infection with either species of *Bilharzia* was unsuccessful.

(v) *Planorbis glabratus*.—Infection with *B. mansoni* was successful

(2) Repellent Varnish "B" against cercarial penetration, supplied by the Burroughs and Wellcome Laboratories, was tried on mice with good results. It is not suitable for human mass application in Egypt on account of its expense.

(3) The Development of *B. haematobia* and *B. mansoni* in mice (*Mus musculus*).

*B. mansoni*.—Mice began passing viable eggs in the feces 40 days after infection. From these *Planorbis* were infected and the life-cycle of the parasite was completed in 75 days.

*B. haematobia*.—Difficulties were met in establishing the infection. The first non-viable eggs were passed in the feces after 82 days. Viable eggs after 100 days. *Bulinus* were infected and the life-cycle completed in 135 days. A striking feature was the relatively small number of female worms in autopsied animals.

4.—*Sulphation of Bulinus eggs :*

Numerous eggs in various stages of development were treated with copper sulphate solutions of 10 and 30 p.p.m. in Nile water for varying lengths of time. (Temp. 22°-28°C.). 10 p.p.m. for 40-48 hrs prevented hatching in all cases; 30 p.p.m. killed 99% of the eggs after 1 hour but even after 3 hours there were still some survivals. On the whole it appeared that in younger clutches the gelatinous matrix afforded a better protective cover for the embryos.

5.—*Egg-output of self-fertilized and cross-fertilized Bulinus truncatus :*

30 self-fertilized and 30 cross-fertilized *Bulinus* snails were observed from birth.

It was found that month by month the self-fertilized snails were better layers, other factors being equal. In 4 months they deposited 16,886 eggs or  $1\frac{1}{2}$  times as many eggs as the cross-fertilized group which laid 10,629 eggs.

6.—*Comparison of the egg-output of infected and uninfected snails :*

The egg-output of 20 laboratory bred *Bulinus*, half of them infected with *Bilharzia* the other uninfected was observed for 1 month. The infected group produced 201 eggs and the uninfected group 2,625. The mortality in the infected group was very high. In a parallel experiment with *Physopsis africana* the infected snails failed to lay.

## Chapter XX — LEPROSY CONTROL

The number of patients who were examined at the various leprosy units during the year 1947 was 1474.

675 patients were found suffering from leprosy ; the other 799 patients suffered from other diseases.

The following table No. 120 shows the distribution of these figures on the different leprosy units in the country.

TABLE No. 120

Unit	No. P. Examined	No. Lepers	No. Nonlepers
Abou Zaabel Colony ... ..	79	79	—
Amria Colony ... ..	34	34	—
Cairo leprosy Hospital ... ..	232	153	79
Zagazig leprosy Clinic ... ..	39	32	7
Alexandria „ ... ..	103	43	60
Mansoura „ ... ..	108	61	47
Tanta „ ... ..	332	76	256
Shebin el Kom „ ... ..	364	61	363
Minia leprosy „ ... ..	38	38	—
Souhag „ „ ... ..	118	71	47
Qena „ „ ... ..	27	27	—
<b>TOTAL ... ..</b>	<b>1,474</b>	<b>675</b>	<b>799</b>

These numbers bring the total number of patients examined in all the leprosy units since leprosy control was started in 1929 up to 27,595 patients, and the number of those suffering from leprosy up to 13,556. Of this last number 3,313 lepers were recorded in more than one unit leaving 10,243 lepers proper on records.

Table No. 121 shows the number of lepers discovered during 1947 distributed on the branches of each unit.

TABLE No. 121.

Unit	Branches	No. lepers	TOTAL
Abou Zaabal Colony ... ..	—	79	<b>79</b>
Amria Colony ... ..	—	34	<b>34</b>
Cairo Leprosy Hospital ... ..	Main Clinic ... .. 11 Citadel B. ... .. 106 Imbaba B. ... .. 19 Kaliub B. ... .. 17		<b>153</b>
Zagazig leprosy Clinic ... ..	Main Clinic ... .. 13 Abu Hammad ... .. 2 Shebin el Kanater ... .. 7 Minia el Kamh ... .. 8 Abou Kebir ... .. 2		<b>32</b>
Souhag leprosy Clinic ... ..	Main Clinic ... .. 28 Tima ... .. 18 Gerga ... .. 14 Tahta ... .. 10 Akhmim ... .. 1		<b>71</b>
Tanta leprosy Clinic ... ..	Main Clinic ... .. 47 Mehalla el Kobra ... .. 8 Zifta ... .. 14 Kallin ... .. 1 Kafr el Zayat ... .. 6		<b>76</b>
Minia leprosy Clinic ... ..	Main Clinic ... .. 26 Beni Mazar ... .. 1 Abou Kirkas ... .. 2 Samallout ... .. 4 Mallawi ... .. 5		<b>38</b>
Alexandria leprosy Clinic ... ..	Main Clinic ... .. 12 Rosetta ... .. 8 Idko ... .. — Damanhour ... .. 15 Dosouk ... .. 7 Karmous ... .. 1		<b>43</b>
Mansoura leprosy Clinic ... ..	Main Clinic ... .. 29 Damietta ... .. 11 Sinbellawain ... .. 9 Sherbin ... .. 2 Dekernis ... .. 10		<b>61</b>
Shebin el Kom leprosy Clinic ...	Main Clinic ... .. 13 Menouf ... .. 12 Ashmoun ... .. 8 Quesna ... .. 6 Benha ... .. 9 Tala ... .. 13		<b>61</b>
Qena leprosy Clinic ... ..	Main Clinic ... .. 11 Luxor ... .. 7 Dershna ... .. 2 Nag, Hammadi ... .. 2 Kous ... .. 5		<b>27</b>

The number of lepers isolated in the Abu Zaabal Colony, Amria Colony, Cairo Hospital and in the segregation camps in the units at the end of 1947 was 761 as against 699 in 1946.

Abou Zaabal Colony	...	...	...	426
Amria Colony	...	...	...	32
Cairo Hospital	...	...	...	221
Sohag S.C.	...	...	...	23
Minia „	...	...	...	37
Mansoura „	...	...	...	12
Qena „	...	...	...	10
TOTAL				<b>761</b>

The rate of attendance in the out-patient units was only about 18 %.

The following table No. 122 shows the monthly attendance.

TABLE No. 122

Month	No of attendances (visits)	Rate
January	9,158	22
February	8,549	22
March	9,491	24
April	1,1036	17
May	8,821	23
June	9,182	18
July	11,163	17
August	7,554	15
September	10,885	10
October	5,516	13
November	5,037	13
December	8,816	16
TOTAL	<b>87,508</b>	<b>18 %</b>

The rate of attendance this year was low because of the cholera epidemic. Treatment was stopped in Zagazig during September and in Tanta during October until November. In Shebin el Kom, it was stopped during October.

*Treatment :*

Hydnocarpus oil was used in the treatment as intramuscular injections given once weekly. 99,065 injections weighing 446 Kgrs. of oil were given during the whole year.

The number of dressings made to patients were 157,913. The following table No. 123 shows the details of these figures.

TABLE No. 123

Month	Number of injections	Weight of oil used	Number of dressings
January ... ..	8,296	23,800	12,004
February ... ..	8,229	36,000	11,740
March ... ..	8,740	42,300	12,151
April ... ..	10,852	50,200	15,756
May ... ..	8,702	40,800	12,535
June ... ..	9,031	42,100	13,531
July ... ..	10,948	51,700	16,654
August ... ..	6,683	31,000	11,758
September ... ..	10,152	47,400	15,989
October ... ..	4,695	21,800	10,214
November ... ..	4,532	20,500	10,887
December ... ..	8,205	38,500	14,694
<b>TOTAL ... ..</b>	<b>99,065</b>	<b>446,100</b>	<b>157,913</b>

The patients were also treated from other accompanying diseases.

### ABU ZAABAL COLONY

#### Admissions :

169 lepers were admitted to the colony during this year. 79 of them were isolated for the first time and the rest were re-admissions. The total number of lepers in isolation at the end of the year was 426.

#### Technical Work :

1. Of the 79 new admissions, 38 were of the nerve type, 3 of the skin type and 38 of the mixed type. Examination of the 90 re-admissions revealed that the condition of most of them deteriorated since leaving the colony. This is mostly due to their resistance being lowered by inadequate mode of living and undernourishment.
2. Perforating ulcers were treated by disinfection, trimming of edges, hot bathing, injection of hydnocarpus oil in the edges and covering with adhesive plaster with rest in bed. Of 29 perforating ulcers, 20 improved considerably and 9 showed slight improvement.
3. Of 582 cases of lepra reaction met with during the year, 57 were severe. All of them were treated with calcium gluconate and tarter emetic injections. In 49 cases the reaction was stopped. The rest are progressing.
4. 628 cases of different skin diseases were recorded among the inmates. 296 of them suffered from scabies. Treatment with Benzyl Benzoate followed by hot baths healed them all. The other 332 cases were treated with various ointments, i.e. Salicylic acid, ammoniated mercury, zinc oxide and calamine lotion. All cases improved except 23 which were still under treatment at the end of the year.

5. Lepers with positive wassermann reaction were closely investigated before being recommended for antisyphilitic treatment. Of a total of 220 specimens taken for Wassermann reaction, 46 were returned positive.

6. Medical cases treated during the year numbered 1869 as follows :

3 cholecystitis, 248 enteritis, 2 ascitis, 42 dysentery, 523 gastritis, 983 constipation and 68 general debility due to old age.

All cases were treated and cured except 57 which were still under treatment at the end of the year.

7. 124 cases of intestinal parasites (77 bilharzia, 35 ascaris and 12 ancylostomiasis) were treated during the year and were all cured.

8. The ophthalmologist paid 26 visits to the colony during the year and in addition to ordinary ophthalmological treatment, operations were performed :—

12 Trichiasis, 23 Post-trachomatous degeneration, 16 Squeezing (M.T.), 3 Pterygium, 1 Excision of lacrymal Sac, 1 Excision of globe, 1 Paracentesis of ante chamber, 9 Probing & Syringing of lacrymal canals, 2 Tarsorrhaphy, 8 Skin & muscle operation, 1 Slitting & cautery of lacrymal canals.

9. The dentist visited the colony 42 times during the year and performed 126 operations (78 Extraction of teeth, 27 roots, 13 pyorrhoea, 8 gum boils).

10. 465 cases of chest diseases affections were diagnosed and treated (3 tuberculosis, 4 Asthma 37 acute bronchitis, 413 mild bronchitis, 8 pneumonia).

11. The number of dressings made to lepers this year was 95,431.

12. 247 surgical operations were performed during the year : 1 amputation of leg, 4 piles, 8 excision of lepromatous masses of the ear, 4 excision of lepromatous nodules, 10 amputation of fingers, 23 removal of bones of hands and feet, 126 incision of abscesses, 71 widening of incisions.

13. 169 samples from the nose and skin of all new admissions were taken for bacteriological examination for microbacterium leprae with the following results : 22 were positive for nose only, 32 positive for skin only, 68 positive for both, 47 negative.

14. 480 samples of urine were examined and gave the following results :

277 bilharzia, 45 albumin, 167 pyuria and 80 urinary deposits. 250 samples of faeces were examined and gave the following results : 12 Ancylostoma, 35 Ascaris.

15. All lepers resident in the colony were examined at the end of the year clinically and bacteriologically with the following findings :

*Clinical findings :*

252 cases improved.

129 cases stationary.

45 cases deteriorated.

*Bacteriological findings :*

4 cases became negative.

11 cases became positive.

411 cases remained unchanged.

*Clinic for the staff of the colony :*

The total number of visits was 2,410 ; 59 was home visits. 6 anti small pox vaccinations and 30 anatoxin inoculations were made and 12 circumcisions were performed on children of personnel. All ophthalmic, dental and parasitic complaints were examined and treated.

## SOCIAL ACTIVITIES

### *School :*

30 Boy-patients attended the day school and 15 adults attended the night school.

### *Library :*

An average of 350 patients visited the library monthly and an average of 100 books were loaned monthly to patients.

### *Sports :*

The number of boy scouts among the inmates was 30 and they practise physical exercises and scout activities with great interest.

### *Recreation :*

The inmates were entertained as usual on different occasions by musicians, singers, called up from Cairo. They were also provided with extra meals during the month of Ramadan and on all national and religious feasts.

The canteen provides commodities at minimum cost, and the club organises games and recreations.

### *Prison :*

There were 11 prisoners suffering from leprosy in detention during the year.

## INDUSTRIAL ACTIVITIES

### *Occupational therapy :*

The various workshops set up in the colony provided the opportunity to most inmates to practise their original occupations which improved their general health considerably and raised their resistance. Meanwhile, large amounts of various articles were manufactured in these work-shops, e.g. clothes, slippers, mattresses, etc. All local repairs to sanitary installations, roads and means of transportation were also carried out by the inmates.

### *Agricultural Activities :*

About 18 feddans of sandy land have been levelled and added to the areas already under cultivation. A large variety of crops was produced during the year. 26 cows were kept in the dairy of the colony this year. These gave 33,792 litres of milk, which was given to the inmates as part of their food.

#### *1.—Power Station :*

142,572 Kilowatts were consumed in light.

10,641 Kilowatts were consumed by the filter plant.

1,636 Kilowatts were consumed by drainage plant.

247,630 Kilowatts were consumed in pumping water for irrigation.

#### *2.—Pumping station :*

A total of 1,310,043 cubic metres of fresh water were pumped from the canal this year. 53,800 c.ms. were filtered for drinking and house hold purposes.

### 3.—*Drainage Plant :*

Some 20,625 cubic metres of waste water were drained this year and used as manure in cultivation.

### 4.—*Repair Workshop :*

All repairs and adjustments required by the different plants were done at the repair workshop.

## CAIRO LEPROSY HOSPITAL

Of the 232 patients examined by the hospital, 153 were found suffering from leprosy. Of these cases, 74 were of the nerve type, 24 of the skin type and 55 of the mixed type.

The inpatient section of this hospital is reserved for the accommodation of female patients until accommodation is provided for them in Abu Zaabal Leprosy Colony. The number of female lepers in isolation at the end of the year was 221. This is about the maximum capacity of the hospital.

Bacteriological examination carried out at the end of the year revealed that of the 221 lepers, 59 were positive and became negative, 4 cases were negative and became positive and 158 remained stationary.

Clinical examination revealed that 144 cases improved, 62 remained stationary, 15 became worse and 6 died.

All domestic duties in the hospital were carried out by the able patients in residence. In this hospital the inmates were also entertained on the special events as in the Abu Zaabal Colony.

The following is a brief picture of the activities of the three out patient clinics annexed to this hospital :

At Embaba Branch : 19 new cases were discovered and 2514 visits were made by the patients during the year.

At the Citadel : 106 new cases were discovered and 8266 visits were made.

At Kaliub Branch : 17 new cases were discovered and 2360 visits were made.

300 of the patients attending the out patient branches were examined and gave and following results :

120 Cases improved, 80 cases remained stationary and 100 cases became worse.

Contacts of lepers were also examined occasionally.

## AMRIA COLONY

This colony was opened on October 22, 1947, to accommodate inmates of the Tanta segregation camp which had to be evacuated on the outbreak of the cholera epidemic in 1947. This colony is 25 kilometres to the west of Alexandria, seven kilometres to the north east of Amria village. It was originally an army hospital.

34 lepers, 22 of the nerve type and 12 of the mixed type, were segregated in this colony during November and December of 1947.

TABLE NO. 124. — NUMBER OF NEW PATIENTS  
AND THOSE FOUND LEPROUS AND RATES PER CENT SINCE 1929

Year	Number of New patients	Number of lepers	Rate per cent
1929 ... ..	394	208	53
1930 ... ..	1,015	433	42
1931 ... ..	1,472	588	40
1932 ... ..	1,287	486	38
1933 ... ..	1,639	744	45
1934 ... ..	1,273	618	49
1935 ... ..	1,083	584	54
1936 ... ..	1,031	726	70
1937 ... ..	1,759	888	50
1938 ... ..	2,171	1,097	50
1939 ... ..	2,198	1,059	48
1940 ... ..	2,298	995	43
1941 ... ..	1,387	728	53
1942 ... ..	1,586	825	52
1943 ... ..	1,488	771	52
1944 ... ..	1,372	672	49
1945 ... ..	1,234	738	59
1946 ... ..	1,434	721	50
1947 ... ..	1,474	685	45

TABLE No. 125.—NUMBER OF PATIENTS ATTENDING LEPROSY UNITS DURING 1947

Units	No. of patients			General Notes on lepers								Transmission of Infection															
	New patients	Negative	Positive	Males	Females	Married	Unmarried	Egyptians	Foreigners	Moslems	Copts	Other religions	Deny Inf.	Admit Inf.	Forgn. Inf.	Fam. Inf.	Father only	Mother	Parents only	Husband	Wife	Sons and daughters	Sisters	Relatives	Cu.	N.	Mix.
Abu Zaabal Colony ... ..	79	—	79	79	—	28	51	79	—	74	5	—	33	26	7	19	1	—	—	—	—	—	8	10	3	38	38
Amria Colony ... ..	34	—	34	34	—	2	32	34	—	32	2	—	32	2	2	—	—	—	—	—	—	—	—	—	—	22	12
Cairo Hospital ... ..	232	79	153	69	44	82	71	153	—	143	10	—	112	41	8	33	3	3	—	—	—	—	8	17	24	74	55
Zagazig „ ... ..	39	7	32	21	11	14	18	32	—	31	1	—	28	4	—	4	—	1	—	—	—	—	—	3	—	12	20
Souhag Clinic ... ..	118	47	71	55	16	39	32	71	—	52	19	—	55	16	—	16	4	1	—	—	—	1	8	2	—	39	32
Tanta „ ... ..	332	256	76	55	21	31	45	76	—	76	—	—	61	15	—	15	6	—	—	1	—	1	2	5	12	46	18
Minia „ ... ..	38	—	38	29	9	18	20	38	—	32	6	—	75	3	—	3	2	—	—	—	—	—	1	—	—	12	52
Alexandria „ ... ..	103	60	43	27	16	15	28	43	—	42	1	—	43	—	—	—	—	—	—	—	—	—	—	—	16	20	7
Mansoura „ ... ..	108	47	61	38	23	25	36	61	—	61	—	—	46	15	—	15	1	—	—	—	—	1	11	2	—	40	21
Shebin el Kom Clinic ... ..	364	33	61	49	12	29	32	61	—	59	2	—	51	10	—	10	3	1	—	—	—	1	5	—	4	35	22
Qena Clinic ... ..	27	—	27	22	5	19	8	27	—	22	5	—	27	—	—	—	—	—	—	—	—	—	—	—	1	15	11
TOTAL ... ..	1474	799	675	518	157	302	375	675	—	624	51	1	543	112	17	115	20	8	—	1	—	4	43	—	39	341	274

TABLE No. 126.—ANNUAL STATISTICS OF LEPERS TREATED IN LEPROSY UNITS DURING 1947.

	Age of patients on first exam.							Age of patients on appearance of disease.												Duration of Disease						Laboratory findings.						
	from 1 - 10	11 - 20	21 - 30	31 - 40	41 - 50	51 - 60	60 and over	from 1 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	46 - 50	51 - 55	56 - 60	over 60	one year	two years	3 - 5 years	6 - 10 years	11 - 15 years	16 - 20 years	21 and over	Neg. B.	Pos. B.	Nose	Skin	N. and S.
Abu Zaabal Col.	—	19	34	19	3	—	—	2	7	14	11	18	12	9	4	1	1	—	—	—	9	7	29	24	4	1	—	34	54	4	5	36
Amria Hospital	—	3	20	9	1	—	1	—	3	14	7	4	4	1	—	—	—	—	—	—	—	—	2	6	7	6	9	22	12	—	—	12
Cairo "	10	49	49	19	15	8	3	5	8	28	31	24	14	6	14	6	8	1	5	—	61	40	38	10	2	1	1	55	98	20	1	60
Zagazig Clinic.	3	12	8	5	2	2	—	1	3	9	4	3	4	4	—	2	—	1	1	1	—	8	12	10	2	—	—	12	20	—	—	20
Souhag "	2	22	27	8	8	3	1	—	10	13	9	10	11	4	5	4	1	1	2	11	9	13	56	1	—	—	20	29	19	—	—	32
Tanta "	9	23	25	8	3	5	3	6	6	16	13	10	8	2	5	—	2	—	5	3	23	20	25	6	2	—	36	40	4	4	22	
Minia "	2	9	—	8	6	2	—	—	5	7	4	5	4	4	4	3	1	—	—	—	2	8	24	8	—	—	13	25	2	9	14	
Alexandria "	3	18	9	10	3	—	1	1	11	6	2	10	4	3	3	2	—	—	—	—	—	—	18	4	—	—	23	20	2	19	17	
Mansoura "	3	27	23	6	2	—	—	1	14	13	5	11	10	3	2	2	—	—	—	—	4	41	16	—	—	—	—	61	40	—	—	21
Shebin el Kom.	9	18	12	13	5	4	—	7	8	7	10	8	5	3	8	2	1	2	—	—	12	14	26	7	—	2	22	39	—	28	11	
Qena "	—	4	4	10	5	3	1	—	1	1	4	3	1	8	3	3	2	—	—	—	2	2	13	6	1	—	13	14	3	—	—	11
Total... ..	40	204	222	115	57	27	10	23	76	129	100	106	77	47	48	25	16	7	13	8	122	103	271	81	15	18	5	250	425	102	67	236

TABLE No. 127.—NUMBER OF PATIENTS IN LEPROSY UNITS DURING 1947 ACCORDING  
TO THEIR BIRTH PLACES AND RESIDENCE

Units	Cairo		Alexandria		Damietta		Canal		Suez		Behera		Gharbia		Menoufia		Dakahlia		Sharkia		Kaliubia		TOTAL	
	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence	Birth	Resi- dence
Abu Zaabal ... ..	2	15	—	—	—	—	—	—	—	1	3	4	9	9	11	11	4	2	3	3	1	1	33	46
Amria ... ..	—	—	—	—	—	—	—	—	—	—	—	—	27	27	4	4	—	—	—	—	—	—	31	31
Cairo ... ..	3	45	—	—	1	1	1	1	1	—	5	3	18	12	14	8	5	3	1	1	24	20	72	94
Zagazig ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3	22	22	7	7	32	32
Souhag ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta ... ..	—	—	—	—	—	—	—	—	—	—	—	—	57	63	12	10	6	6	—	—	—	—	75	79
Minia ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Alexandria ... ..	—	—	6	8	—	—	—	—	—	—	18	18	16	16	—	—	—	—	—	—	—	—	40	42
Mansoura ... ..	—	—	—	—	3	3	—	—	—	—	—	—	8	8	—	—	50	50	—	—	—	—	61	61
Shebin el Kom ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	51	51	—	—	—	—	9	9	60	60
Qena ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	5	60	6	8	4	4	1	1	1	1	26	25	135	135	92	84	69	64	26	26	41	37	405	45

TABLE No. 128.—NUMBER OF PATIENTS IN LEBROSY UNITS DURING 1947 ACCORDING TO THEIR BIRTH-PLACES AND RESIDENCE. (Contd.)

Units	Total		Giza		Beni Suef		Fayoum		Minia		Assiut		Gerga		Qena		Aswan		Western desert		Southern desert		Sinai		Abroad		TOTAL	
	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence
Abu Zaabal ... ..	33	46	9	7	4	4	1	1	2	1	6	5	9	8	5	3	5	3	—	—	1	1	—	—	4	4	79	79
Amria ... ..	39	31	1	1	—	—	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cairo ... ..	72	94	35	34	13	11	3	3	6	1	9	5	7	1	3	1	2	2	—	—	—	1	—	—	2	—	153	153
Zagazig ... ..	32	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
Suhag... ..	—	—	—	—	—	—	—	—	—	—	11	11	57	57	3	3	—	—	—	—	—	—	—	—	—	—	71	71
Tanta ... ..	75	76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	76	76
Minia ... ..	1	—	—	—	2	2	—	—	20	27	1	9	1	—	1	—	—	—	—	—	—	—	—	—	—	—	38	38
Alexandria ... ..	40	42	—	—	—	—	—	—	—	—	13	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	43	43
Mansoura ... ..	61	61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	61	61
Shebin el Kom ... ..	60	60	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61	61
Qena ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	26	1	1	—	—	—	—	—	—	—	—	27	27
TOTAL ... ..	206	413	66	43	10	17	4	4	28	29	40	31	67	57	38	33	8	6	—	—	3	5	3	—	6	1	675	675

## Chapter XXI—SUMMARY OF THE WORK OF THE DEPT. OF LABORATORIES

### 1.—*Bacteriological Section :*

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories, during the year 1947, was 588,046.

### 2.—*Clinical Pathological Section :*

3,131 specimens were examined during the year under review in this Section.

### 3.—*Chemical Section :*

The total number of samples examined chemically in the Central Laboratories, Assiut and Tanta Chemical Laboratories, during the year 1947 was 62,068.

### 4.—*Water Section :*

#### (a) *Bacteriological Service :*

The total number of samples of water, aerated water, ice and syrup examined by this section, during the year 1947, was 8,205.

#### (b) *Chemical Service.*

During the year some 1,477 samples of water have been subjected to chemical analysis.

### 5.—*Antirabic Institute and Hospital :*

During the year 1947—9,640 patients attended the Institute. Out of these, 9,323 were fully treated.

### 6.—*Serum and Vaccine Institute :*

The following vaccines and sera have been prepared during the year 1947 :

(1) T.A.B. ... ..	1,051,560 ccs.
(2) Anti-plague vaccine ... ..	81,575 ccs.
(3) Cholera vaccine ... ..	30,709,963 ccs.
(4) Diphtheria prophylactic (Formal Toxoid) ... ..	<div> <div>34,146 boxes — each box for one person.</div> <div>362,820 ccs. (17,868 bottles of 20 ccs) 546 bottles of 10 cc.)</div> </div>
(5) Calf lymph vaccine ... ..	20,081,000 doses.
(6) Diphtheria antitoxin ... ..	3,247 amps. 4,000 I.U.
(7) Anti-scorpion serum ... ..	29,782 amps.
(8) Anti-tetanus serum ... ..	400 amps. — 3,000 units.

## Chapter XXII—SUMMARY OF THE WORK OF FOUAD I INSTITUTE FOR TROPICAL DISEASES

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### OUTPATIENT DEPARTMENT

The patients are examined clinically in addition to examination for ova, worms, protozoa, estimation of haemoglobin by the Sahli's method, on the same day. Other investigations are carried out for each patient according to the results of the above examinations. These investigations include :

- ( 1 ) Red blood cells' count : including measurement of diameter.
- ( 2 ) Total and differential white cells' count.
- ( 3 ) Count of Blood platelets.
- ( 4 ) Bleeding and coagulation times.
- ( 5 ) Sedimentation rate.
- ( 6 ) Making and examination of Sternal punctures.
- ( 7 ) Examinations for blood parasites.
- ( 8 ) Complete urine analysis.
- ( 9 ) Liver and Kidney function tests.
- (10) Fractional test meal.
- (11) Examination of stools for fats, starch, blood, etc.
- (12) Estimation of proteins, urea and icterus index.
- (13) Wassermann and Kahn tests.
- (14) Widal test.
- (15) Stools, urine, and blood culture.
- (16) Examination of different excreta for the organisms present.
- (17) Sensitivity tests.
- (18) X-ray.

There are adequate facilities for electrocardiography and estimation of the metabolic rate. Sigmoidoscopy is done in the out-patients for cases of intestinal bilharziasis and chronic dysentery.

Parasitic diseases were treated in the out-patient Department. Patients suffering from organic diseases incompatible with treatment were either admitted to the in-patient Department or referred to the competent hospitals after diagnosing their diseases.

### NUMBER OF PATIENTS

5,980 patients were treated in the Outpatient Department in 1947, as follows :

- 408 male patients were less than 12 years of age.
- 3,243 male patients were more than 12 years of age.
- 359 females were less than 12 years of age.
- 1,970 females more than 12 years of age.

864 patients were referred to other hospitals or treated in our In-patient Department as follows :

## *Diseases of the Heart and Blood Vessels :*

Mitral Stenosis Rheumatic in origin	...	...	...	...	...	...	...	24	patients.
Double mitral	...	...	...	...	...	...	...	20	,,
Mitral Stenosis and Aortic regurgitation	...	...	...	...	...	...	...	9	,,
Heart failure	...	...	...	...	...	...	...	36	,,
Hypertension	...	...	...	...	...	...	...	48	,,
Thrombophlebitis in femoral vein...	...	...	...	...	...	...	...	3	
Congenital heart	...	...	...	...	...	...	...	2	,,
Heart affected by goitre	...	...	...	...	...	...	...	6	,,
Aortic regurgitation syphilitic in origin	...	...	...	...	...	...	...	3	,,
Angina pectoris	...	...	...	...	...	...	...	3	

### *Respiratory Diseases :*

[illegible]

### *Diseases of the Digestive System :*

[illegible]

### *Diseases of the Urinary Tract:*

Pyelitis	... ..	14 patients.
Renal colic	... ..	16 „
Enlarged prostate	... ..	17 „
Hydro and pyo nephrosis	... ..	7 „
Acute nephritis	... ..	2 „
Subacute nephritis with general oedema	... ..	2 „
Chronic nephritis	... ..	7 „
Cystitis	... ..	30 „
Bilharzia in the urethra	... ..	1 „
Chyluria	... ..	3 „
Elephantiasis of the scrotum	... ..	1 „
Epididymo-Orchitis	... ..	3 „

### *Diseases of Nervous System :*

Sciatica	...	...	...	...	...	...	...	...	...	...	...	7	patients
Myelitis	...	...	...	...	...	...	...	...	...	...	...	4	"
Hemiplegia	...	...	...	...	...	...	...	...	...	...	...	5	"
Bell's palsy	...	...	...	...	...	...	...	...	...	...	...	2	"
Trigeminal neuritis	...	...	...	...	...	...	...	...	...	...	...	1	"
Muscular atrophy	...	...	...	...	...	...	...	...	...	...	...	2	"
Tumour of the pituitary gland	...	...	...	...	...	...	...	...	...	...	...	2	"
Tuberculosis of the vertebral column	...	...	...	...	...	...	...	...	...	...	...	4	"
Epilepsy	...	...	...	...	...	...	...	...	...	...	...	7	"
Parkinson's Disease	...	...	...	...	...	...	...	...	...	...	...	3	"
Myelosyphilis	...	...	...	...	...	...	...	...	...	...	...	2	"

### *Defficiency Diseases :*

Pellagra 34, none of whom showed any nervous manifestation.

### *Blood Diseases :*

Lymphatic leukaemia	...	...	...	...	...	...	...	...	...	...	1	patients
Purpura	...	...	...	...	...	...	...	...	...	...	2	"

Anaemia (less than 50 m/m HB) 206 thus :

Ancylostoma anaemia	...	...	...	...	...	...	...	...	...	126	"
Anaemia due to intestinal bilharziasis	...	...	...	...	...	...	...	...	...	27	"
Anaemia due to urinary bilharziasis	...	...	...	...	...	...	...	...	...	15	"
Haemorrhagic anaemia	...	...	...	...	...	...	...	...	...	12	"
Anaemia due to malaria	...	...	...	...	...	...	...	...	...	12	"
Idiopathic hypochronic anaemia	...	...	...	...	...	...	...	...	...	9	"
Anaemia associated with chronic nephritis...	...	...	...	...	...	...	...	...	...	4	"
" " " Pulmonary T.B.	...	...	...	...	...	...	...	...	...	3	"
" " " chronic dysentery	...	...	...	...	...	...	...	...	...	2	"
Pernicious anaemia	...	...	...	...	...	...	...	...	...	1	"

### *Miscellaneous :*

Typhoid fever	...	...	...	...	...	...	...	...	...	...	3	patients
Paratyphoid A	...	...	...	...	...	...	...	...	...	...	2	"
" B	...	...	...	...	...	...	...	...	...	...	1	"
Parotitis	...	...	...	...	...	...	...	...	...	...	2	"
Benign tertian malaria	...	...	...	...	...	...	...	...	...	...	23	"
Malignant malaria	...	...	...	...	...	...	...	...	...	...	6	"
Query fever	...	...	...	...	...	...	...	...	...	...	3	"
Primary Syphilis	...	...	...	...	...	...	...	...	...	...	1	"
Syphilitic rash	...	...	...	...	...	...	...	...	...	...	2	"
Leprosy	...	...	...	...	...	...	...	...	...	...	2	"
Gonorrhoea	...	...	...	...	...	...	...	...	...	...	9	"

### TREATMENT OF INTESTINAL WORMS IN YEAR 1947

The treatment used this year in the O.P. was just the same as that applied the year before and in the same doses. In addition to that tetrachlorethylene has been tried in ancylostoma. It was given in gelatin capsules in doses of 3 ccs. for an adult weighing 60 kgrs. A dose of magnesium sulphate was to be given 4 hours later.

The results were unsatisfactory. The treatment was tried on 50 patients with ancylostoma infection. The following results were obtained :

(1) The stools were negative for ancylostoma ova in 9 patients out of the 50. 6 only out of these came regularly every week, only 4 of them proved negative one month after treatment.

(2) The stools were positive for the ova in 41 patients one week after treatment. Another dose from the above-mentioned drug was given to 21 of them after which examinations revealed that 19 of them were still positive and 2 turned negative. Of the 19 patients, 8 were given a third dose, but results were still positive in all of them.

Trials are now being made on the same drug *i.e.* tetrachlorethylene without putting it in gelatine capsules. Results will be published as soon as they are ready.

Atebrine has been used in treatment of tapeworm. The results of this sort of treatment showed that they entirely depended on the way of preparing the patient before receiving the treatment.

Two days before treatment the patient should abstain from taking solid foods which leave much residue in the intestines. It is preferable to put him on fluid diet as soup and fruit juices during these 2 days. A rectal enema is made on the evening just before the dose.

Atebrine was given in doses according to weight of patients. Ricin oil or Mg SO<sub>4</sub> is given one to two hours later.

53 patients were treated in that way. They can be classified into two groups.

*Group 1.*—Comprising 34 patients, who followed carefully the given instructions. 28 of these were cured, proved by the presence of the scolices in the stools, thus the percentage of cure in this group is 82.

*Group 2.*—Includes 19 patients who did not stick to the instructions given or whose stools were not examined in the hospital. Seven of them were proved to be cured that is a ratio of 36 per cent.

Toxic symptoms occurred only in two patients. One had an attack of vomiting that continued for three hours which was due to the fact that his rectal enema was not done properly so that the dose of ricin oil or Mg SO<sub>4</sub> was not satisfactorily efficient.

This caused the absorption of more atebrin with the result of this vomiting.

The other patient had vomiting for 5 hours. Next day he came to hospital with an urticarial rash and rapid pulse accompanied by hypertension. He improved on calcium and adrenaline injections.

There is a pamphlet under publication on this subject discussing it in more detail.

#### TREATMENT OF BILHARZIA IN 1947

The treatment used in the O.P. was the same as that introduced in August 1947 *i.e.* treatment with 6.5 per cent repodral solution prepared locally and administrated in the same way as the year before.

This method was modified by giving 50ccs. to an adult weighing 60 kgs on 10 successive days starting with the maximum dose (5 ccs).

The ratio of apparent cure, *i.e.* result of examination made immediately after the 10th injection was 75.25 per cent.

No toxic symptoms of particular importance occurred apart from nausea, rheumatic pains and sometimes vomiting.

A series of experiments on the oral treatment of Bilharzia by Meracil D (Nilodin) are being conducted this year in conjunction with the British Research Institute.

The drug is still under trial and preliminary notes on its use were published in the Journal of the Royal Egyptian Medical Association.

# BACTERIOLOGY SECTION

The following investigations were carried out during the year 1947 :

347 samples were cultured out of which :

34 samples were positive thus :

7 for B. dysentery Flexner.]  
 4 „ B. „ „ Shiga.  
 6 „ B. Morgani.  
 8 „ Sonne.  
 1 „ paratyphosus A.  
 1 „ „ „ A and B.  
 7 „ B. paracolon.

## Cultures of urine :

249 Samples were cultured, 152 giving negative results and 97 were positive as follows :

46 samples for B. Coli.  
 4 „ „ B. Friedlander.  
 6 „ „ B. Pyocyaneus.  
 16 „ „ B. Typhosus.  
 4 „ „ B. Paratyphosus. B.  
 9 „ „ B. Paracolon.  
 3 „ „ B. Paraquery.  
 9 „ „ Staphs.

A film of sputum was examined for T. B and was negative. 7 samples were examined for gonococci. 4 of them were positive. One sample was examined for leprosy and was negative. A swab was found positive for fusiform bacillus and spirochaetes.

6 samples of blood were cultured. One of them was positive for streptococcus.

## The Kahn Flocculation Test for Blood :

79 cases were positive out of 339 specimens examined as follows :

2 ±  
 20 +  
 29 ++  
 20 +++  
 10 ++++  
 12 samples were unfit for examination.

## Widal test for blood :

39 sera were examined out of which 18 were positive, 19 negative and 2 unfit for examination.

T. H., T. O. — Para A	...	...	...	...	1
: : : : : : : B	...	...	...	...	1
T. H.	...	...	...	...	2
T. O.	...	...	...	...	1
Para A	...	...	...	...	5
„ B	...	...	...	...	1
T. H., para A	...	...	...	...	1
T. H, T. O.	...	...	...	...	5
T. O., para A	...	...	...	...	1

## BIOCHEMISTRY DEPARTMENT

(1) We began to prepare the Fasciola antigen.. The method adopted by Drs. Ali Hassan and El Betash was first used but, owing to the difficulty of this method, the long time it takes, (3 — 4 days) and the putrefaction of the worms, we have adopted another simple and quick method (30 minutes).

The worms were treated with acetone several times. This serves for dehydration and removal of fats. The antigen prepared by both methods was found to be identical when used in the hospital.

(2) We tried to introduce the thymol turbidity test as a liver function test in the laboratory but the lack of certain chemicals made it difficult to continue this work.

(3) Estimation of blood tyrosine in cases of jaundice was tried by a liver function test, but its high content in parasitic infections made it of no value.

(4) We tried to investigate the effect of standing on repodral. The Sb., III content of 6.3 per cent solutions of repodral was estimated on three consecutive days but no difference in its content was observed (the solution was boiled daily).

An increase in the Sb. content was, however, observed on the 7th day and this might be due to slow evaporation as a result of successive boiling.

(5) Estimation of the purity of D.D.T. was carried out in the Research Institute.

(6) At the request of the Ministry of Agriculture, D.D.T. treated wheat was tested for toxicity. Laboratory animals were fed for a month on bread made of this wheat. The animals thrived well and showed no toxic symptoms.

(7) Great success has been achieved in the oral administration of antimony. After exhaustive experiments we succeeded in having antimony absorbed in the blood and tissues. Bilharzia infected monkeys were successfully treated by this method.

(8) The Biochemistry department took part in the estimation of Nilodin in blood and urine.

(9) Analysis of specimens of water from cholera infected areas were carried out. Preparation of solutions for medical analysis in the Fever Hospital was done.

(10) Copper sulphate solutions of different concentrations were made. Estimations of copper were carried out.

(11) 1900 more cases of biochemical analysis than last year were carried out in this Department.

## DEPARTMENT OF HAEMATOLOGY

This department investigates out-patients and in-patients for :

(1) Haemoglobin estimations, count and measures of R.B.Cs to the differentiation of anaemias.

(2) Total and differential leucocytic count.

(3) Platelet count, evaluation of bleeding and coagulation and differentiation between the hoemorrhages.

(4) Reticulocytic count.

(5) Sedimentation rate.

(6) Fragility test for R.B.Cs.

(7) Diagnosis of blood parasites viz, malaria, borrelia, filaria and Leishmania.

(8) Estimation of prothrombin in plasma.

(9) Estimation of bilirubin in plasma.

(10) Examination of bone marrow cytology by sternal punctures.

In the second half of year 1947, the technique of most of the procedures improved to an extent that made our laboratory stand on the same footing as those in America. For each test, the simplest and most accurate procedure out of several devised for the same purpose has been carefully selected. The following are the most important alterations made.

(1) The use of photo electric colorimeter in the estimation of haemoglobin instead of Sahli's apparatus. This avoids the personal factor in reading, because in the former it is given by a pointer working on a galvanometer. It is also a rapid way of estimation which enables the estimation to be done to a great number of patients at the same time.

(2) The substitution of the normal saline used for the dilution in the red blood count by Hayen and Gaver's solutions which have an advantage over the former of keeping the R.B.C. intact and without agglutination for a longer time.

(3) Dameshek method for blood platelets and reticulocytes was used instead of counting them : This gives more accurate results because blood platelets are less liable to bursting.

(4) Wintrobe's method for sedimentation rate was introduced which affords means for simultaneous measuring of the R.B.C. size, thus providing facilities for the necessary correction of each rate.

(5) Photoelectric cell was used in estimation of bilirubin content of serum and gives more accurate results than the ordinary colorimeter used before.

(1) The use of supravital staining in cases where the determination of the kind of cells by ordinary stains is rather deficient but it was not found to be a practicable method due to the great effort needed in preparing the films and lack of a well trained assistant in this particular process.

In addition to the routine work, the department has diagnosed some cases of blood diseases, the occurrence of some of which was regarded rare in Egypt.

The following are some of the said cases :

(1) Cases of acquired haemolytic anaemia.

(2) Cases of Aplastic anaemia which did not improve on iron alone and was diagnosed outside as Myelophthisic anaemia.

(3) Anaemia due to tumours, the primary growth of which was a carcinoma of stomach.

(4) Three cases of lymphatic leukaemia.

(5) Two cases of myelogenous leukaemia.

(6) One case of monocytic leukaemia.

(7) Two cases of haemophilia.

(8) Two cases of non thrombopenic purpura.

(9) A case of Hodgkin's Sarcoma.

35 Sternal punctures were made, the examination of which was of great help in diagnosis.

The cellular picture of the sternal puncture was particularly studied in some cases and results will be published as soon as convenient.

The establishment of a blood bank in the Institute was considered but was found impossible due to lack of serum necessary for blood grouping as well as the special bottles in which the blood is stored.

As regards the routine investigations for the out-patients and in-patients the following was done :

Hæmoglobin ... ..	7,673
Total blood count ... ..	691
Red blood count ... ..	25
White blood count ... ..	83
Differential and total blood count ...	59
Sedimentation rate ... ..	128
Platelets count ... ..	18
Bleeding time ... ..	14
Coagulation time ... ..	14
Reticulocytic count	
Malaria ... ..	350 out of which 20 were positive.
Filaria ... ..	30 which were all negative.

Different liver function tests were made to find out the extent of pathological dysfunction in each case. These results were compared to others with normal liver function which were difficult to find due to the fact that practically all our patients suffer from diseases which affect the physiological function of the liver. A result that was arrived at is that one blood sample from a patient was enough for the performance of all these tests. This means that only one visit to the laboratory was sufficient to show any disorder in the liver function.

These tests are :

I.—Tests determining the secretory power of the liver.

1.—Quantitative estimation of bilirubin in blood by using the electric colorimeter method in reading the results after 1 and 30 minutes respectively. This makes one dispense with the Van Den Berg test.

2.—Using the brom sulphaline test in cases free from jaundice. Results were read by the electric colorimeter.

II.—Tests depending on alterations in ratio and sort of blood protein. They include :

1.—Cephalin flocculation.

2.—Thymol turbidity and Thymol flocculation.

Results of these two examinations differ according to the pathological condition of the liver and the different stages of disease in the same patient. Details on this subject will be published separately.

III.—Tests depending on alteration in the ratio of fat content of blood.

These include estimation of cholesterol and its ester in blood. In spite of their importance, we could not do any research of use.

IV.—Estimation of prothrombin in blood by Quick's method.

V.—Estimation of ratio of urobilin in urine per 24 hours.

A control on a great number of normal cases should be made before concluding the extent of affection of any of these tests by different diseases met with in our patients.

The department hopes to complete these investigations during this year.

#### WORK DONE IN FAYED MALARIA STATION

The preventive and curative activities of the station were continued throughout the area on the same lines as in previous years.

Of a total of 9,996 blood samples examined during the year by the station, 38 or 0.38 % were found positive for malaria. 36 of these were benign tertian and 2 malignant tertian.

### *Anopheles Larvae :*

During the year, 46 breeding places for anopheline larvæ were detected. Larva species were found in the following ratios :

30 samples or 65.2% were pharoensis  
 1 „ or 2.2% was Sergentai  
 13 „ or 28.3% were multicolor  
 2 „ or 4 % were mauritianus

This shows that the A. Pharoensis is the predominant species.

These were found in abundance during July and September.

### *Miscellaneous :*

The staff of the station took part in the campaign against the cholera epidemic.

### MALARIA REPORT

A total of 16,436 blood samples were received at the Institute for examination for parasites. 1,400 samples or 8.63% of the total were returned positive for parasites. 1298 of these or 8% of total samples examined were positive for malaria (1,245 for benign tertian, 42 for malignant and one mixed.) Among these samples; 14 were returned positive for relapsing fever and 88 for filaria.

Out of a total of 1,839 samples received by the Entomological Section of the Institute for examination, 1493 contained one species of larva, 122 contained two species and 6 contained three species.

Of 126 samples containing adult insects, 113 contained one species and 13 contained more than one species.

Among the samples received, two were collected from aircraft, 3 contained insects not of the mosquito family with ova for determining whether these are hatchable or otherwise. Five of the samples consisted of snails only.

In addition, 924 tubes were received containing insects collected from rats trapped in ports.

A large number of insecticides was examined during the year for their killing strength. Some were rejected on account of weakness and high cost. Researches were made on the effect of D.D.T. on flies, lice, mosquitoes and larvae.

The Section also took part in experiments made on the treatment of bilharzia by mouth and on the effect on animals of bread made out of D.D.T.-treated-wheat and comparison of results with those of D.D.T. powder given to animals in equal quantities as might be found in such bread on the presumption that these quantities underwent no change during processes of washing the wheat, drying, grinding and baking.

A. *befureatus* was discovered for the first time in the Egyptian Oases and apparently in Egypt.

Papers of the Staff of the Institute Published in the Journal of the Royal Egyptian  
 Medical Association 1947.

On the Effect of the Delta Isomer of Benzene Hexachloride (Deltaxane) on the  
 Snails *Bulinus* and *Planorbis*.

By A. Halawani

Jan. 1947, Vol., XXX, No. : 1 .

A Preliminary Report on the Antimalarial CAM-AQI.

By : A. Halawani, I. Baz and F. Morkos.

Feb. 1947, Vol. XXX, No. 2.

The Antimalarial Chloroquine - Diphosphate (Aralen)

By : A. Halawani, I. Baz and F. Morkos.

March 1947, Vol. XXX., No. 3

Therapeutic Active Stilbenes

By : Nazih Latif.

May 1947, Vol. XXX, No. 5.

The Pathology of Hypersplenic Syndromes.

By : A. Y. Awany,

October 1947, Vol. XXX., No. 10.

Effect of Copper Sulphate on Vibrio Cholerae.

By : A. Halawani and A.A. Omar.

November 1947, Vol. XXX, No. 11.

Treatment of Bilharzia by the Oral Route.

By : M. Said El Ayadi, B. Sc., M. Sc., Ph. D.

November 1947, Vol. XXX, No. 11.

Miracil D : Investigation of Blood Levels after a Single Dose.

By : A. Halawani & J. Newsome.

December 1947, Vol. XXX, No. 12.

On the Antimalarial Activity of Nivaquine C.

A. Halawani, I. Baz and F. Morkos.

December 1947, Vol. XXX, No. 12.

Insects that are carried into Egypt by aeroplanes.

I. I. Baz.

No. 4 April 1947 Vol. XXX, PP. 85-89.

Benzedrine in General Medicine.

By : Dr. Gamal El Din Nor El Din.

October No. 10 Vol : XXX, PP. 362-376.

Medical Review.

By : Dr. Gamal El Din Nor El Din.

Ibid. PP. 386-399.

Advances in treatment - New drugs.

Ibid. PP. 400-407.

Defence of Egypt against Cholera.

By : Dr. M. Khalil Abd El Khalik Bey.

Vol : XXX. No. 11 November 1947 : PP. 441-476.

The role of Climatic conditions in the spread of cholera.

By : Dr. A. El Halawani.

Ibid. PP. 503-516.

Recent Knowledge on Cholera

By : Dr. Gamal El Din Nor El Din.

Vol XXX, No. 12. December 1947 PP. 631-645.

Summary of Recent researches on Cholera

Vol. XXX, No. 12. December 1947 PP. 646-649.

## Chapter XXIII—SUMMARY OF THE WORK OF THE MEMORIAL OPHTHALMIC LABORATORY, GIZA,

### *Research Work:*

The field experiments begun last year on the Ophthalmia epidemics have been continued. A successful method of mass chemo-prophylaxis evolved in the course of the work was reported at the Annual Congress of the Ophthalmological Society of Egypt. A great many other problems are still under investigation.

In the Laboratory, research into the aetiology of trachoma was continued and various problems of bacteriological and clinical interest were investigated. Details will be found in the 15th Report of the Laboratory.

### *Pathology:*

The routine pathological work of the Government Ophthalmic Hospitals was carried out as usual at the Laboratory.

255 pathological specimens were reported upon, of which 45 were enucleated globes.

### *Post-Graduate Instruction:*

As in previous years, the Staff of the Laboratory shared in the teaching of candidates for the Diploma of Ophthalmic Medicine and Surgery. Courses of lectures on bacteriology, fundus diseases, slit-lamp microscopy were given, and practical demonstrations were held.

## Appendix I—Medical Permits

TABLE No. 129.—NUMBER OF PRACTITIONERS OF THE MEDICAL  
AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1947 AS  
COMPARED WITH THAT OF THE YEAR 1946

Profession	At the end of 1946	At the end of 1947
Medical Practitioners ... ..	4,287	4,395
Veterinary Surgeons ... ..	529	547
Dental Surgeons ... ..	527	538
Dentists without diplomas * ... ..	118	116
Pharmacists ... ..	1,140	1,250
Assistant Pharmacists * ... ..	332	330
Midwives ... ..	871	936

\* No permits are now issued to persons of these two categories.

TABLE No. 130.—NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS  
IN EGYPT DURING THE LAST FIVE YEARS.

Profession	1943	1944	1945	1946	1947
Medical Practitioners ... ..	115	100	151	194	142
Veterinary Surgeons ... ..	28	14	12	28	24
Dental Surgeons ... ..	10	17	2	8	14
Pharmacists ... ..	43	25	46	62	120
Midwives ... ..	25	35	59	61	68
Dayas Green Pemits ... ..	276	77	147	192	141
Dayas White Permits ... ..	3	2	2	—	2
Barbers ... ..	11	5	14	2	7

TABLE No. 131.—NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE MEDICAL  
PROFESSIONS DURING 1947

Profession	Egyptians	Greeks	Lebanese	Saoudi Arabians	British	Palestinian	TOTAL
Medical Practitioners ... ..	134	4	1	1	1	1	142
Veterinary Surgeons ... ..	24	—	—	—	—	—	24
Dental Surgeons ... ..	13	1	—	—	—	—	14
Pharmacists ... ..	120	1	—	—	—	—	120
Midwives ... ..	68	—	—	—	—	—	68

TABLE No. 132.—ORIGIN OF MEDICAL DIPLOMAS WHOSE HOLDERS WERE  
AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1947

Profession	Cairo	Alexandria	Great Britain	Switzerland	Lebanon	France	Greece	Germany	TOTAL
Medicine ... ..	27	9	10	8	5	4	4	5	<b>142</b>
Veterinary Surgery ... ..	24	—	—	—	—	—	—	—	<b>24</b>
Dental Surgery ... ..	11	—	—	—	2	—	1	—	<b>14</b>
Pharmacy ... ..	108	—	—	1	5	3	—	3	<b>120</b>
Midwifery ... ..	68	—	—	—	—	—	—	—	<b>68</b>

TABLE No. 133.—THE ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN PRACTITIONERS WHO  
WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1947.

Professions	Universities							TOTAL
	Cairo	Alexandria	British	German	Swiss	French	Lebanese	
Medicine ... ..	96	9	9	4	8	4	4	<b>134</b>
Veterinary ... ..	24	—	—	—	—	—	—	<b>24</b>
Dentistry ... ..	11	—	—	—	—	—	2	<b>13</b>
Pharmacy ... ..	120	—	—	—	—	—	—	<b>120</b>
Midwifery ... ..	68	—	—	—	—	—	—	<b>68</b>

TABLE No. 134.—RESULT OF THE STATE EXAMINATIONS HELD DURING 1947 FOR MEDICAL PRACTITIONERS<sup>6</sup>  
PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS FOR THE  
PURPOSE OF RECORDING THEIR NAMES IN THE MINISTRY'S REGISTER

Examinations	Number	Egyptians		Foreigners		TOTAL	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine ... ..	51	4	17	2	28	6	<b>45</b>
Pharmacy ... ..	21	5	13	—	3	5	<b>16</b>
Dentistry ... ..	26	2	10	6	8	8	<b>18</b>

## Appendix II—REPORT ON THE WORK OF THE CENTRAL, GOVERNORATE AND PROVINCIAL MEDICAL COMMISSIONS DURING THE YEAR 1947.

### *The Central Medical Commission:*

The number of medical certificates issued by the Central Medical Commission during 1947 was 29,674 i.e. 4,745 certificates more than in 1946, in spite of the extension of the attributions of Medical Commissions in Governorates and Provinces to cover the granting and approval of sick leaves up to 60 days and the invaliding out of service of temporary officials and hors cadre employees and daily paid staff without further reference to the Central Medical Commission for final sanction.

Of this number 16,205 candidates for government service or educational missions abroad were examined by the Central Medical Commission. These consisted of 8,512 candidates for permanent or temporary posts, 247 for educational missions and 7,446 for hors cadre posts.

57.2% of the first group and 41.8% of the last group passed the medical examination. Of the 42.8% failures in the first group 22.7% failed in vision - Myopia accounting for most of them; 7.9% for defects of the urinary system - albumen or traces thereof being the main cause; 2.2% for heart diseases with incompetency of the heart as the main complaint, and 4.0% for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases. Of the 58.2 % failures in the last group, 38.9% failed in vision. - Myopia accounting for most of them; 12.5% for defects of the urinary system, albumen or traces thereof being the main cause; 1.5% for heart diseases, with incompetency of the heart as the main complaint and 5.3% for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility, flat feet or respiratory diseases.

A total of 9,197 medical certificates dealt with leaves granted to government officials reporting sick. These consisted of 6,556 pensionable and temporary officials and 2,641 hors cadre employees.

Of those granted sick leaves by the Central Medical Commission or by the Cairo District Medical Officers of Health and approved by the Central Medical Commission, 3,613 pensionable and temporary officials and 974 hors cadre employees were found suffering from medical diseases and 1,725 pensionable and temporary officials and 699 hors cadre employees were found suffering from surgical and ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and the ratios of their prevalence :

TABLE No. 135

Diseases	P. and T. Officials		H.C. Employees	
	Number	Ratio to total	Number	Ratio to total
		%		%
Nose and Larynx ... ..	327	6.11	64	3.82
Bronchi and Lungs ... ..	331	6.20	78	4.72
Heart and Blood Circulatory System ... ..	241	7.89	65	3.88
Stomach and Intestines ... ..	117	2.19	52	3.11
Liver ... ..	355	6.65	38	2.27
Kidneys and Cystis ... ..	199	3.73	44	2.63
Neurasthenia ... ..	75	1.41	2	— .12
Mental Diseases ... ..	215	4.03	112	6.69
Nervous System ... ..	175	3.28	34	2.03
Anaemia and General Debility ... ..	458	8.58	115	6.87
T.B. ... ..	426	7.98	231	13.81
Syphilis ... ..	2	— .04	4	— .23
Rheumatism ... ..	385	7.21	102	6.09

TABLE No. 135. (contd.)

Diseases	P. and T. Officials		H.C. Employees	
	Number	Ratio to total	Number	Ratio to total
Fevers ... ..	58	1.09	20	1.19
Other Medical Diseases ... ..	69	1.29	13	— .78
Eye Diseases ... ..	179	3.35	51	3.05
Ear Diseases ... ..	42	— .79	12	— .72
Appendicitis ... ..	44	— .82	29	1.73
Hernias ... ..	33	— .62	26	1.55
Fistulas ... ..	72	1.35	13	— .78
Piles ... ..	81	1.52	21	1.25
Hydroceles ... ..	14	— .26	2	— .11
Urinary System and Stones ... ..	28	— .53	9	— .54
Various Surgical Operations ... ..	988	18.51	410	24.51
Fractures ... ..	166	3.11	105	6.27
Dental Diseases ... ..	78	1.46	21	1.25

53,831 officials and employees were granted from 1-10 days sick leave by Cairo District Medical Officers of Health and by Markaz and Sanitary Outpost M.Os. in all the Provinces and Governorates during the year 1947. Of these 41,232 or 76.6% suffered from medical diseases; 10,311 or 19.1% suffered from surgical diseases; and 2,288 or 4.3% suffered from ophthalmic diseases. The number of days sick leave granted to the pensionable and temporary officials only totalled 185,801.

1,812 pensionable and temporary officials and 634 hors cadre employees in Cairo only were granted from 1-10 days sick leave by the Central Medical Commission or by Cairo District Medical Officers of Health.

228 pensionable and temporary officials and 86 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

1,196 pensionable and temporary officials and 1,169 hors cadre employees were examined by the other Provincial and Governorate Medical Commissions but were not granted any sick leave.

3,526 pensionable and temporary officials and 1,039 hors cadre employees were granted from 11 to 30 days sick leave and over by the Central Medical Commission and by Cairo Medical Officers of Health.

The Central Medical Commission granted 60 pensionable and temporary officials longer sick leaves terminating by their retirement on pension; and pronounced 150 hors cadre employees medically unfit for further service.

24 pensionable and temporary officials and 37 hors cadre employees were pronounced fit for further service.

#### *Medical Examination of Private and Passenger Pilots :*

Of 148 candidates for private pilot licence "A" examined by the Central Medical Commission during 1947 - 116 were found fit (103 in the first examination, 9 in the second and 4 in the third examination). 26 of the 32 failures were examined once, 5 were examined twice and 1 was examined three times).

Of 25 candidates for passenger pilot licence "B" examined by the Central Medical Commission during 1947-20 were found fit (18 in the first examination, 1 in the second and 1 in the third examination). The 3 failures were examined once.

Out of 108 private pilots examined for renewal of licences, 102 were found fit (100 in the first examination and 2 in the second examination). 5 of the failures were examined once and 1 was examined twice.

Out of 99 passenger pilots examined for renewal of licences, 98 were found fit in the first examination and 1 in the second examination.

#### *Provincial and Governorate Medical Commissions :*

A total of 55,978 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year 1947; i.e. an increase of 8,668 certificates over those of last year.

TABLE No. 136.—CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES FOR WHICH SICK LEAVES WERE GRANTED BY THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS AND BY THE DISTRICT M.Os. IN CAIRO AND APPROVED BY THE C.M.C. DURING THE YEAR 1947

DISEASES

	Medical Diseases																	Surgical and Ophthalmic Diseases																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	Total										
Central Medical Commission Cairo.	Nose and Larynx	Bronchi and Lungs	Heart and Cir. System	Stomach and Intestines	Liver	Kidney and Cystis	Neurasthenia	Mental Diseases	Anaemia and General Debility	Nervous System	Cereb. and Cord	T. B.	Syphilis	Rheumatism	Fevers	Other Medical Diseases				Eye Diseases	Ear Diseases	Appendicitis	Hernia	Fistula	Piles	Hydroceles	Urinary System and Stones	Other Surgical Operations	Fractures	Dental Diseases											
	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.										
	64	331	421	117	38	199	75	215	175	34	458	115	426	2	4	385	69	13	3,613	179	61	44	29	33	26	72	13	81	21	14	2	28	9	988	410	166	105	78	21	1,725	599
Other Governorate and Provincial Commissions ...	185	724	462	466	253	270	237	2	27	729	771	121	2	86	687	610	4,907	319	181	260	82	36	40	50	101	97	73	169	171	38	65	95	103	935	2,557	229	1,140	98	60	2,010	4,645
	5,344	3,735	1,923	2,967	395	1,245	176	81	3,735	5,344	3,735	1,923	2,967	395	1,245	176	81	3,735	5,344	3,735	1,923	2,967	395	1,245	176	81	3,735	5,344	3,735	1,923	2,967	395	1,245	176	81	3,735	5,344				
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

TABLE NO. 137---DETAILS OF THE WORK OF THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS DURING THE YEAR 1947.

[illegible]

### Appendix III.—Report on the Work of Central Stores

The Central Stores have furnished the following new units with equipment and other requirements :

- (1) Helmiet el Zeitoun hospital.
- (2) New sections at Abbassia fever hospital.
- (3) Two ancylostoma branches at district hospitals.
- (4) 250 beds at Abu Zabal leprosy colony.
- (5) A new 15-bed ward in the hospital annexed to the Research Institute for Tropical Diseases.
- (6) A district hospital at Becentway.
- (7) Two dental clinics.
- (8) A permanent ophthalmic unit in tents.
- (9) Mehalla el Kobra fever hospital.
- (10) A new health office at Kaman el Matahna.
- (11) A chest diseases dispensary with an in-patient section.
- (12) An in-patient section to Qena chest diseases dispensary.
- (13) Port Said chest diseases sanatorium.
- (14) Expansion of Kom el Shokafa sanatorium.
- (15) Completing the furniture of the child welfare centre at Suhag.
- (16) A venereal diseases' clinic.
- (17) Two Health propaganda units.

The following table No.138 shows the work of the Central Stores during the year 1947.

TABLE NO. 138.—SHOWING WORK OF CENTRAL STORES IN BRIEF

Kind of work	1947
Receipt vouchers ... ..	20,105
Issue „ ... ..	70,845
Claims ... ..	3,068
Outward correspondence ... ..	244,168
Inward correspondence ... ..	174,097
Postal parcels dispatched .. ..	23,466
„ „ received ... ..	5,544
Railway „ dispatched ... ..	05,442
„ consignments received ... ..	3,699
Repairs carried out by C. S. workshops ...	128,237
New works „ „ „ ... ..	130,850

The following are the new units opened during the year :

- (1) 14 Health units at Shabas, El Hamr, Saft-Torab, Elserw, Mahallet-Dimna, Elazizieh, Abu el Naga, Mit-Afif, Shater-Zada, El Azizieh-Fayoum, Tahna el Gabal, Tahanasha, El Balayza and Awlad Tak-Shark.
- (2) 2 ophthalmic hospitals at Kaliub and Kom Ombo.
- (3) An ophthalmic ward at El Matahna hospital.

- (4) A Health office at Sennouris.
- (5) Helmiet El Zeitoun hospital.
- (6) 2 out-patient clinics at El Matahna and Taftesh el Wady.
- (7) 3 health centres converted into district hospitals, El Moghazy Pasha at Becent-way, Kafr Azzazy and Shoubra el Khema.
- (8) 6 Public baths at Sidi Abdel Gawad, Zeinhom, Darb el Nosieh, El Otof, El Bakria and Tora el Faroukieh.
- (9) 27 water taps at different quarters in Cairo, 7 of these were contributed by Cairo Water Company.
- (10) 3 Basins for washing vegetables.
- (11) A first class ward, 3 3rd class wards, a shed for visitors to third class patients and expansion of nurses residence at Abbassia fever hospital.
- (12) 1 Farouk Sanitary Flying Squadron.
- (13) 4 Venereal diseases clinics at Fakous, Ismailia, Kafr el Zayat and Heliopolis.
- (14) 6 Bilharzia eradication units at Damanhour, Behera province, Qena, Aswan, Luxor, Kaliub, Beni Suef and Menouf.
- (15) Amria leprosy colony.
- (16) An Ancylostoma hospital No. 43 at Abu el Matamir.
- (17) 11 in-patient sections at Ancylostoma hospitals at Benha, Zagazig, Sahel Selim No. 5, Akhmin No. 14, Kafr el Zayat No. 17, Sennouris No. 18, Maragha No. 21, Qena No. 25, Abu Tig No. 28, Santa No. 38 and Badary No. 42.
- (18) 2 Ancylostoma branches at Nag-Hamadi and Dessouk.
- (19) 5 in-patient sections at Ancylostoma clinics at Kous No. 5, Luxor No. 7, Abu Kebir No. 8, Kafr el Sheikh No. 13 and Port Said No. 12.
- (20) 3 Child Welfare centres at Mansura, Sennouris, and Sayeda Zeinab, Cairo.
- (21) 2 Chest diseases branches at Ismailia in connection with Port-Said Dispensary and at Akhmim in connection with Suhag Dispensary.
- (22) 1 Sanatorium at Mehalla el K bra.

TABLE NO. 139.—CONTRACTS AND ORDERS IN 1947

Kind of work	Number
General adjudications ... ..	465
Local ,, ... ..	113
Contracts ... ..	742
Local indents ... ..	407
Foreign indents... ..	55
Forms 50 C.G. ... ..	5,691
Subjects submitted to the Contract Board ...	3,047
No. of meetings held by the ,, ,, ...	186
Tenders submitted in general adjudications ...	1,971
No. of agreements ... ..	6
Miscellaneous indent ... ..	101
Tenders submitted in local adjudications ...	520
Purchase performed by bargain .. ..	35

## Appendix IV.—Details of Budget Grants and Actual Expenditures

TABLE No. 140.

Titles	Budget Grants		Actual Expends	
	1946	1947	1946	1947
TITLE I.				
Salaries, Wages, Allowances ... ..	1,300,929	1,415,705	1,278,545	1,165,463
TITLE II.				
General Expenditures ... ..	1,919,382	1,847,780*	1,907,317	1,641,161
TITLE III.				
New Works ... ..	914,174	545,695	972,878	321,940
TOTAL ... ..	4,134,485	3,809,180	4,158,740	3,128,564

\* Additional credits of L.E. 50.000 and L.E. 20.000 were granted under laws Nos. 26 and 32 of 1948.



TABLE No. 142.—DETAILS OF BUDGET GRANTS AND EXPENDITURES, UNIVERSITIES HOSPITALS

	Fouad 1st University Hospitals				Alexandria University Hospitals			
	Budget Grants		Actual Expenses		Budget Grants		Actual Expenses	
	1946	1947	1946	1947	1946	1947	1946	1947
TITLE I.								
Salaries, Wages, Allowances ... ..	132,348	148,023	133,281	122,924	36,377	40,516	32,542	26,276
TITLE II.								
General Expenditures ... ..	412,600	393,600	408,623	319,025	81,700	85,090	91,855	82,102
TITLE III.								
New Works ... ..	41,500	27,000	16,659	1,904	10,000	48,720	3,032	35,952
	586,448	568,523	558,563	443,853	128,077	174,326	127,429	144,332

UNIVERSITIES HOSPITALS DEPT.

DETAILS OF POSTS

TABLE No. 143

Posts	Fouad I Hospitals		Alexandria Hospitals		TOTAL	
	1946	1947	1946	1947	1946	1947
<i>Technical Posts :</i>						
Permanent ... ..	88	96	20	33	108	129
Temporary ... ..	215	256	69	73	284	329
<i>Adm. and Clerical Posts :</i>						
Permanent ... ..	40	39	11	17	51	56
Temporary ... ..	8	8	—	—	8	8
<i>Hors Cadre Personnel</i> ... ..	1,312	1,405	286	314	1,598	1,719
GRAND TOTAL ... ..	1,663	1,804	386	437	2,049	2,241

## Appendix V.—Summary of a Report on the State of Public Health in Alexandria

TABLE NO. 144.

Population	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	928,237
Births	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46,325
Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22,518
Infantile Mortality (under One year)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8,885
Still Births	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	598
Cases of Infectious Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11,392
Deaths from Infectious Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,098

THE FOLLOWING TABLE NO. 145— GIVES THE TOTAL NUMBER  
OF CASES AND DEATHS FROM INFECTIOUS DISEASES RECORDED  
IN ALEXANDRIA DURING THE YEAR 1947.

Disease	Cases	Deaths
Cholera	313	109
Typhus	15	8
Cerebro Spinal Meningitis	11	6
Typhoid	634	113
Paratyphoid	78	1
Scarlet fever	5	—
Diphtheria	310	75
Measles	2,411	216
Whooping Cough	142	1
Mumps	236	2
Benign Tertian Malaria	616	2
Malignant Malaria	8	4
Erysipelas	566	15
Tetanus	61	36
Pulmonary T.B.	1,313	686
Other forms of T.B.	76	73
Chicken Pox	406	3
Influenza	1,362	2
Puerperal Fever	108	13
Amoebic Dysentery	231	51
Bacillary Dysentery	106	5
Anthrax	1	1
Broncho Pneumonia	1,719	1,525
Lobar Pneumonia	733	142
Leprosy	6	—
Encephalitis Lethargica	1	1
Plague	15	5
Relapsing Fever	2	1
Acute Poliomyelitis	6	1
Small Pox	1	—
Undulant Fever	1	1
<b>TOTAL</b>	<b>11,392</b>	<b>3,098</b>

TABLE No. 146.—INFECTIOUS DISEASES PROPHYLACTIC VACCINATIONS DURING 1947.

Authority undertaking Vaccination	Typhoid		Diphtheria				Small Pox		Plague		Typhus		Cholera
	1st Injec.	2nd Injec.	1st Injec.	2nd Injec.	3rd Injec.	Serum	Voluntary	Compulsory	1st	2nd	1st	2nd	
<i>Public Health Offices</i> ...	51,125	28,139	25,417	22,131	20,869	351	10,363	32,809	3,269	1,437	937	445	56,701
<i>Mobile Squads</i> ...	73,719	55,024	—	—	—	—	220,952	—	2,758	698	153	—	845,502
<i>Private Practitioners</i> ...	3,210	397	65	18	18	—	17,290	—	—	—	—	—	—
TOTAL ...	128,054	83,560	24,482	22,149	20,887	351	248,605	32,809	6,027	2,135	1,090	445	902,203 ]

## Appendix VI.—Report on the Work of Cairo City Health Department.

During 1947, there were 4,458 more births and 8,127 fewer deaths in Cairo than in the previous year. Infantile deaths were also 1,784 fewer than in 1946. This gives a ratio of 161 infantile deaths per thousand births, the lowest on record and 38.6 per thousand less than last year.

With the exception of the cholera epidemic which lasted about two months and accounted for 128 cases, the incidence of infectious diseases in Cairo was on the whole satisfactory.

Herebelow are details of births, deaths, infectious diseases, etc. supported by statistical tables. These include statements of the important infectious diseases admitted to the Abbassia Fever Hospital.

The statement on passenger control shows that 99.56 per cent of the total passengers arriving from abroad were observed.

Brief statements are given on the sanitary control of public women; unhealthy, inconvenient and dangerous establishments; general sanitation, police health office and food control in Cairo.

For the first time this report deals with activities of public bath-houses and laundries, inoculation and vaccination office and the ante matrimony examination room.

The estimated mid-year population of Cairo in 1947 was 1,573,800.

The following is the distribution of this population on the different qisms:

Kubba	...	...	...	...	...	...	...	...	...	55,900
Heliopolis	...	...	...	...	...	...	...	...	...	48,700
Zeitoun	...	...	...	...	...	...	...	...	...	49,900
Abbassia...	...	...	...	...	...	...	...	...	...	101,600
Ezbekia	...	...	...	...	...	...	...	...	...	62,300
Rod el Farag	...	...	...	...	...	...	...	...	...	145,900
Shoubra	...	...	...	...	...	...	...	...	...	110,100
Sharabia...	...	...	...	...	...	...	...	...	...	45,000
Gamalia	...	...	...	...	...	...	...	...	...	90,300
Bab el Shaaria	...	...	...	...	...	...	...	...	...	106,900
Abdin	...	...	...	...	...	...	...	...	...	82,700
Mouski	...	...	...	...	...	...	...	...	...	43,900
Darb el Ahmer	...	...	...	...	...	...	...	...	...	92,100
Khalifa	...	...	...	...	...	...	...	...	...	86,900
Sayeda I	...	...	...	...	...	...	...	...	...	77,800
Sayeda II	...	...	...	...	...	...	...	...	...	73,200
Bulaq I	...	...	...	...	...	...	...	...	...	52,600
Bulaq II	...	...	...	...	...	...	...	...	...	59,900
Bulaq III	...	...	...	...	...	...	...	...	...	51,300
Old Cairo	...	...	...	...	...	...	...	...	...	66,900
Helwan	...	...	...	...	...	...	...	...	...	32,100
Maadi	...	...	...	...	...	...	...	...	...	37,800

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TOTAL ... .. 1,573,800

### *Births :*

The total number of births (excluding still-births) registered during the year was 100,546 with an increase of 4,458 over last year and a birth rate of 63.6 per thousand of population.

Table No.147 gives the number of births distributed on the various qisms and their rates per thousand of population.

The number of still-births registered during this year was 2,091 making a ratio of 20.69 per thousand births as compared with 20.25 during 1946, 20.89 during 1945 and 17.47 during 1944.

### *Deaths :*

During this year, a total of 45,233 deaths were registered of which 1,546 occurred amongst non residents of Cairo. This leaves 43,687 deaths for Cairo proper, or 8,127 less than 1946 and a death rate of 27.5 per thousand of population as compared with 33.7 during 1946, 33.9 during 1945, and 34.5 during the last five years (1941-1945).

Table No.147 shows the distribution of these deaths on the various qisms and their rates compared with each other and with the rates of previous years.

### *Infantile mortality :*

The total number of deaths of infants under one year of age was 17,201 or 1,784 less than the previous year, and a rate of 161 per thousand births as compared with 199.6 in 1946, 208 in 1945 and 220 in last five years (1941-1945). This infantile mortality constituted 39.3 per cent of total deaths as compared with 36.6 in 1946 and 37.6 in 1945.

Table No. 147 shows the distribution of these deaths on the various qisms.

### *Causes of infantile mortality :*

Diarrhoea and enteritis are still the most important diseases affecting children. They are responsible for 10,146 or 59.1 per cent of the infantile deaths amounting to 17,201. Marasmas and general debility come next accounting for 4,786 deaths or 27.8 per cent. 1,121 deaths or 6.5 per cent were due to respiratory system diseases. This figure does not include deaths from broncho pneumonia and lobar pneumonia which accounted for 666 deaths or 3.8 per cent. Other diseases accounted for 483 deaths or 2.8 per cent of infantile deaths.

### *Death Inquiries :*

The total number of uncertified deaths which required investigation was 20,865 i.e. 46 per cent of the total deaths of Cairo.

District Medical Officers of Health investigated 6,102 deaths or 29.2 per cent of that number. The remaining 14,763 deaths were examined by district midwives (Table No. 148).

### *Infectious Diseases :*

The total number of cases of infectious diseases during 1947 was 14,413 and 1047 cases from outside Cairo, as compared with 29,196 cases during 1946, 20,627 in 1945, 20,287 during 1944 and 27,771 during 1943.

The total number of deaths from infectious diseases during the year was 4,200 or 9.6 % of the total number of Cairo deaths as compared with 11.5 % in 1946, 10.4% in 1945, 13.2% in 1944 and 15.8% in 1943.

Table No. 149 shows the incidence of the most prevalent infectious diseases in Cairo districts:

### *Cholera :*

Cholera appeared in Cairo City on September 23, 1947. The wave of the epidemic continued until the week ending October 28, 1947. By the week ending November 25, 1947, cholera had disappeared from Cairo City. 128 positive cases were recorded in all with a ratio of 0.081 per thousand of population.

The north, north east and north west suburbs of Cairo were the most affected by the disease since they form the entrance to the city. The highest incidence was recorded in Zeitoun, Kubba, Rod el Farag, Shoubra and Sharabia Ezbas respectively (Table No. 150).

The fact that the epidemic came to an end so abruptly was due to the great efforts and stringent measures taken by the medical officers of health.

### *Anti Cholera Vaccination :*

Vaccination teams were formed up for the immediate vaccination of the northern districts, then the remainder of the City. A total of 1,833,807 persons were vaccinated.

### *Typhoid Fever :*

The number of cases notified during the year was 2,050 with 202 deaths or a rate of 1.292 and 0.127 respectively per thousand population as compared with 2,374 cases with 289 deaths and a rate of 1.5 and 1.187 respectively per thousand of population during 1946 (Table No. 151).

The total number of persons vaccinated against typhoid this year was 255,036. 166,020 persons received a second injection.

### *Diphtheria :*

The number of cases notified this year was 980 with 159 deaths or a rate of 0.617 and 0.101 respectively per thousand of population as compared with 991 cases and 199 deaths and a rate of 0.644 and 0.129 respectively during 1946 (Table No. 152).

The number of children receiving three anti-diphtheria injections was 62,756.

### *Measles :*

The number of cases of measles notified during this year was 996 with 506 deaths or a rate of 0.627 and 0.32 respectively per thousand population as compared with 1,629 cases and 862 deaths and a rate of 1.059 and 0.144 respectively during 1946 (Table No. 153).

### *Typhus :*

The number of cases notified this year was 49 with 10 deaths or a rate of 0.031 and 0.006 per thousand of population as compared with 141 cases and 40 deaths and a rate of 0.092 and 0.023 respectively during 1946. (Table No. 154).

The total number of persons vaccinated against typhus was 3,373. 602 received a second injection and 231 a third injection.

Slides for bacteriological examination were taken by medical officers of health. 544 were from living persons and 75 after death. The result was negative.

### *Small-pox :*

Ten cases of small pox with one death were notified this year or a rate of 0.006 and 0.001 respectively per thousand population as compared with 20 cases and no deaths and a case rate of 0.013 per thousand population during 1946 ; 121 cases with

6 deaths and a rate of 0.081 and 0.004 respectively during 1945; 2,288 cases with 129 deaths during 1944, and 1,283 cases with 83 deaths during 1943. This proves that the small pox epidemic which began in 1943 subsided in 1945 and began to disappear during 1946 and 1947 (Table No. 155).

#### *Anti-Small-pox Vaccination :*

A general vaccination against small pox was launched in 1946. 286,715 inhabitants were vaccinated during that year in Helwan, Maadi, Old Cairo, Sayeda I and Sayeda II qisms. The number vaccinated during 1947 was 645,764 in Darb el Ahmar, Muski, Khalifa, Gamalia, Abdin, Adawia, Bulaq II and Bulaq I qisms.

#### *Relapsing Fever :*

14 cases with 8 deaths were recorded during the year as compared with 11,903 cases and 351 deaths in 1946 and 2,404 cases and 52 deaths in 1945. This shows that the epidemic which began in 1945 reached its climax in 1946 and began to disappear in 1947. (Table No. 156).

The regular dusting with insecticides of persons, clothing, bedding and habitations was maintained in the City. A total of 1,652,552 persons were dusted.

#### *Cerebro Spinal Fever :*

The number of cases notified this year was 72 with 31 deaths or a rate of 0.045 and 0.019 respectively per thousand of population as compared with 45 cases with 28 deaths and a rate of 0.029 and 0.018 respectively in 1946, and 36 cases with 23 deaths and a rate of 0.024 and 0.015 respectively in 1945. (Table No. 157).

#### *Scarlet Fever :*

Two cases of Scarlet fever with no deaths were notified during 1947 as compared with 3 cases in each of 1946, and 1945 and 7 in 1944. (Table No. 158).

#### *Influenza :*

The number of cases notified during 1947 was 1421 with 3 deaths or a rate of 0.895 and 0.042 respectively per thousand of population as compared with 4634 cases with 14 deaths and a rate of 0.1701 and 0.009 respectively in 1946 and 2604 cases with 8 deaths and a rate of 1.8 and 0.005 respectively in 1945.

#### *Tuberculosis :*

The number of cases notified during 1947 was 3232 cases with 1,483 deaths or a rate of 2.03 and 0.934 respectively per thousand of population as compared with 2986 with 1503 deaths and a rate of 1.72 and 0.977 respectively in 1946 and 3,082 cases with 1567 deaths and a rate of 7.1 and 1.7 respectively in 1945.

#### *Deaths Attributed to Confinement :*

Deaths attributed to confinement amounted to 219 or a rate of 2.16 per thousand births as compared with a rate of 1.3 during 1946, 1.8 during 1945, 1.3 during 1944 and 1.4 during 1943. Of this figure, 118 were due to puerperal fever or a rate of 1.7 per thousand births as compared with a rate of 0.48 during 1946, 0.5 during 1945, 0.4 during 1944 and 0.51 during 1943.

The total number of mothers who died within a fortnight of confinement (excluding puerperal fever deaths) amounted to 101 as compared with 91 during 1946, 112 during 1945, 80 during 1944 and 53 during 1943.

The causes of these deaths are :

- 13 eclampsia.
- 36 metrorrhagy.
- 5 difficult labour.
- 6 rupture of uterus.
- 3 abortion.
- 4 ectopic gestation.
- 4 caesarian case
- 3 peritonitis.
- 3 acute cirrhosis of the liver.
- 9 heart failure.
- 3 toxemia.
- 3 nervous shock.
- 5 other diseases.
- 2 infectious diseases.

*Disinfection :*

A total of 575,525 rooms were disinfected during 1947. Of this number 43,879 rooms were done by Abbassia disinfection station, 11,525 rooms by Fom el Khalig disinfection station and the remaining 3125 by Khalifa disinfection station.

This number does not include rooms dusted or sprayed with D.D.T.

TABLE NO. 147.—VITAL STATISTICS OF CAIRO CITY 1947.

District	Population	No. of deaths	Death Rate per 1,000 of Popul.	No. of Births	Birth Rate per 1,000 of popul.	Infantile Deaths	Infantile Death rat per 1,000 Births
Kubba ... ..	55,900	1,661	29·72	3,893	69·64	730	190
Heliopolis ... ..	48,700	931	19·11	2,123	43·59	267	126
Zeitoun ... ..	49,900	1,794	35·52	4,132	82·81	733	177
Abbassia ... ..	101,600	2,343	23·06	6,284	61·83	727	116
Ezbekia ... ..	62,300	1,278	20·45	2,758	44·27	446	162
Rod El Farag ... ..	145,900	3,578	24·41	9,049	61·99	1,433	158
Shubra ... ..	110,100	3,239	29·41	8,356	75·86	1,338	160
Sharabia ... ..	45,000	1,703	37·84	4,481	99·57	765	171
Gamalia ... ..	90,300	2,558	28·32	5,620	62·21	1,024	182
Bab el Shaaria ... ..	106,900	2,614	24·44	6,443	59·24	977	152
Abdine ... ..	82,700	1,696	20·61	3,066	57·07	567	185
Musky ... ..	43,900	958	21·81	2,062	46·95	353	171
Darb el Ahmar ... ..	92,100	2,461	26·71	56,42	61·22	1,020	187
Khalifa ... ..	86,900	2,887	32·54	5,701	64·25	1,152	202
Sayeda I ... ..	77,800	2,500	33·41	6,192	79·57	990	159
Sayeda II ... ..	73,200	2,153	29·41	3,697	50·51	993	268
Bulaq I ... ..	52,600	1,448	27·53	2,988	56·81	553	185
Bulaq II ... ..	59,900	1,550	29·57	3,372	64·11	610	180
Bulaq III ... ..	51,300	1,705	33·23	5,730	97·69	749	131
Old Cairo ... ..	66,900	2,449	36·59	5,093	76·09	996	175
Helwan ... ..	32,100	853	26·55	1,951	60·41	340	174
Maadi ... ..	37,800	1,228	32·28	1,923	50·86	438	227
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>43,687</b>	<b>27·52</b>	<b>100,546</b>	<b>6·364</b>	<b>17,201</b>	<b>161</b>
<b>TOTAL FOR 1946 ... ..</b>	<b>1,533,900</b>	<b>51,814</b>	<b>33·7</b>	<b>95,088</b>	<b>619</b>	<b>18,985</b>	<b>199·6</b>
<b>TOTAL FOR 1945—1941 ... ..</b>	<b>7,100,900</b>	<b>246,913</b>	<b>34·5</b>	<b>380,660</b>	<b>54·5</b>	<b>83,799</b>	<b>220·1</b>
„ <b>1940—1936 ... ..</b>	<b>6,782,080</b>	<b>179,150</b>	<b>26·4</b>	<b>290,141</b>	<b>2·7</b>	<b>56,916</b>	<b>195·8</b>
„ <b>1935—1931 ... ..</b>	<b>6,173,300</b>	<b>162,326</b>	<b>26·2</b>	<b>265,745</b>	<b>43·4</b>	<b>53,323</b>	<b>200·6</b>
„ <b>1930—1926 ... ..</b>	<b>5,064,100</b>	<b>152,856</b>	<b>30·2</b>	<b>235,003</b>	<b>46·4</b>	<b>51,853</b>	<b>220·6</b>

TABLE NO. 148.—DISTRIBUTION OF UNCERTIFIED DEATHS AND DEATH INQUIRIES  
IN THE VARIOUS DISTRICTS OF CAIRO 1947.

District	All Deaths	Uncertified deaths			Death Rates
		investigated by Dist. M.Os.	Investigated by Dist. Hakimas	District Totals	
					%
Kubba... ..	1,661	315	518	833	50
Heliopolis ... ..	931	85	218	303	3·25
Zeitoun ... ..	1,794	660	757	1,417	79
Abbassia ... ..	2,343	66	186	252	10·7
Ezbekia ... ..	1,278	150	349	499	39
Rod el Farag ... ..	3,578	145	687	832	23
Shubra ... ..	3,239	200	315	515	15·9
Sharabia ... ..	1,703	278	1,081	1,359	79·8
Gamalia ... ..	2,558	313	214	527	26
Bab el Shaaria ... ..	2,614	180	583	763	29·1
Abdine ... ..	1,696	165	633	798	47
Musky ... ..	958	159	215	374	39
Darb el Ahmar ... ..	2,461	500	450	950	32·2
Khalifa ... ..	2,887	420	1,578	1,998	14·4
Sayeda (I) ... ..	2,600	322	1,000	1,322	50·8
Sayeda (II)... ..	2,153	178	1,587	1,765	77·6
Bulaq (I) ... ..	1,448	271	649	920	63·5
Bulaq (II) ... ..	1,550	364	786	1,150	74·1
Bulaq (III) ... ..	1,705	473	814	1,287	75·4
Old Cairo ... ..	2,449	457	1,178	1,635	66·7
Helwan ... ..	853	153	441	594	69·6
Maadi ... ..	1,228	248	524	772	62·8
<b>TOTAL ... ..</b>	<b>43,687</b>	<b>6,102</b>	<b>14,763</b>	<b>20,865</b>	<b>47·7</b>

TABLE No. 149.—DISTRICT DISTRIBUTION OF CASES AND DEATHS OF THE PRINCIPAL INFECTIOUS DISEASES 1947.

District	Population	Cholera		Small pox		Relapsing fever		C. S. fever		Typhus		Typhoid		Scarlet fever		Diphtheria		Measles	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Kubba ...	55,900	9	3	1	—	—	—	2	1	3	—	101	8	—	—	24	3	32	5
Heliopolis ...	48,700	—	—	4	—	—	—	3	—	—	—	80	5	—	—	39	8	16	5
Zeitoun ...	49,900	31	11	—	—	1	—	1	—	2	—	57	9	—	—	25	6	86	61
Abbassia ...	101,600	3	3	—	—	—	—	7	6	4	—	203	28	1	—	66	17	52	8
Ezbekia ...	62,300	—	—	—	—	—	—	4	3	1	—	90	16	—	—	29	2	25	12
Rod el Farag ...	145,900	31	9	—	—	1	—	5	3	2	—	199	14	—	—	61	8	55	19
Shubra ...	110,100	11	3	—	—	1	—	7	1	2	—	155	19	—	—	46	19	30	10
Sharabia...	45,000	2	—	—	—	—	—	—	—	—	—	80	2	—	—	26	1	26	13
Gamalia ...	90,300	2	—	—	—	1	—	4	1	—	—	120	9	—	—	60	13	35	8
Bab el Shaaria ...	106,900	5	—	—	—	—	—	6	3	2	—	110	11	—	—	63	8	32	8
Abdine ...	82,700	2	—	—	—	—	—	1	1	1	—	100	10	1	—	44	6	59	35
Musky ...	43,900	—	—	1	—	—	—	3	1	2	—	47	7	—	—	9	3	29	11
Darb el Ahmar ...	92,100	1	—	1	—	—	—	8	4	4	—	112	9	—	—	57	7	47	23
Khalifa ...	86,900	5	—	—	—	—	—	2	—	2	—	89	8	—	—	42	6	84	53
Sayedat I ...	77,800	1	—	—	—	2	—	7	2	—	—	101	14	—	—	105	5	47	8
Sayedat II ...	73,200	1	1	2	1	—	—	7	4	1	—	116	15	—	—	104	20	70	39
Bulaq I ...	52,600	2	—	—	—	1	—	1	—	1	—	52	6	—	—	34	7	38	22
Bulaq II ...	59,900	1	1	—	—	1	—	1	—	—	—	55	5	—	—	41	5	32	13
Bulaq III ...	51,300	1	—	—	—	1	—	—	—	—	—	33	2	—	—	24	5	46	32
Old Cairo ...	66,900	3	1	—	—	—	—	3	—	—	—	91	4	—	—	40	7	115	80
Helwan ...	32,100	4	1	—	—	—	—	—	—	—	—	24	1	—	—	5	1	3	0
Maadi ...	37,800	15	6	—	—	2	2	—	—	1	—	35	—	—	—	6	2	47	41
<b>TOTAL ...</b>	<b>1,573,800</b>	<b>128</b>	<b>36</b>	<b>10</b>	<b>1</b>	<b>14</b>	<b>8</b>	<b>72</b>	<b>31</b>	<b>49</b>	<b>10</b>	<b>2050</b>	<b>202</b>	<b>2</b>	<b>—</b>	<b>980</b>	<b>189</b>	<b>966</b>	<b>506</b>

TABLE No. 150.—CASES AND DEATHS OF CHOLERA IN CAIRO QISMS 1947

Qism	Population	No. of Cases	Case rate per 1,000 of population	No. of Deaths	Death rate per 1,000 of population	Case Mortality rate per cent
Kubba ... ..	55,900	9	,161	3	,054	33,3
Heliopolis ... ..	48,700	—	—	—	—	—
Zeitoun ... ..	49,900	31	,621	11	,220	36
Abbassia ... ..	101,600	3	,030	—	—	—
Ezbekia ... ..	62,300	—	—	—	—	—
Rod el Farag ... ..	145,900	31	,211	9	,062	30
Shubra ... ..	110,100	11	,100	3	,027	127
Sharabia ... ..	45,000	2	,044	—	—	—
Gamalia ... ..	90,300	2	,022	—	—	—
Bab el Shaaria ... ..	106,900	3	,028	—	—	—
Abdine ... ..	82,700	2	,024	—	—	—
Musky... ..	43,900	—	—	—	—	—
Darb el Ahmar... ..	92,100	1	,011	—	—	—
Khalifa ... ..	86,900	5	,056	—	—	—
Sayeda I ... ..	77,800	1	,013	—	—	—
Sayeda II ... ..	73,200	1	,014	1	,.14	100
Bulaq I ... ..	52,600	2	,038	—	—	—
Bulaq II ... ..	59,900	1	,017	1	,017	100
Bulaq III ... ..	51,300	1	,019	—	,019	—
Old Cairo ... ..	66,900	3	,045	1	,015	33,3
Helwan ... ..	32,100	4	,124	1	,031	25
Maadi ... ..	37,800	15	,397	6	,159	40
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>128</b>	<b>.081</b>	<b>36</b>	<b>023</b>	<b>28</b>

TABLE No. 151.—CASES AND DEATHS OF TYPHOID IN CAIRO QISMS 1947

Qism	Population	No. of Cases	Case rate per 1000 of population	No. of Deaths	Death rate per 1,000 of population	Case Mortality rate per cent
Kubba... ..	55,900	101	1,806	8	·143	8
Heliopolis ... ..	48,700	80	1,642	5	·103	6
Zeitoun ... ..	49,900	57	1,142	9	·180	16
Abbassia ... ..	101,600	203	1,014	28	·274	14
Ezbekia ... ..	62,300	90	1,445	16	·257	8
Rod-el-Farag ... ..	145,900	199	1,363	14	·096	7
Shubra ... ..	110,100	100	1,407	19	·173	12
Sharabia ... ..	45,000	80	1,778	2	·044	3
Gamalia ... ..	90,300	120	1,329	9	·099	8
Bab el Sharia ... ..	106,900	110	1,029	11	·103	10
Abdine ... ..	82,700	100	1,209	10	·121	10
Musky ... ..	43,900	47	1,070	7	·159	5
Darb el Ahmar ... ..	92,100	112	,215	9	·098	8
Khalifa ... ..	86,900	89	1,003	8	·090	9
Sayeda I ... ..	77,800	101	1,298	14	·179	14
Sayeda II ... ..	73,200	116	1,585	15	·205	13
Bulaq I ... ..	52,600	52	,989	6	·114	12
Bulaq II ... ..	59,900	55	,918	5	·835	9
Bulaq III ... ..	51,300	33	,643	2	·389	6
Old Cairo ... ..	56,900	91	1,359	4	·059	4
Helwan ... ..	32,100	24	,747	1	·311	4
Maadi ... ..	37,800	35	,926	—	—	—
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>2,050</b>	<b>1,292</b>	<b>202</b>	<b>·127</b>	<b>10</b>

TABLE No. 152.—CASES AND DEATHS OF DIPHTHERIA IN CAIRO DISTRICTS 1947

District	Population	No. of Cases	Case rate per 1,000 of population	No. of Deaths	Death rate per 1,000 of population	Case Mortality rate per cent
Kubba... ..	55,900	24	.429	3	.054	13
Heliopolis ... ..	48,700	39	.801	8	.164	21
Zeitoun ... ..	49,900	25	.501	6	.120	24
Abbassia ... ..	101,600	66	.649	17	.167	26
Ezbekia ... ..	62,300	29	.465	2	.032	7
Rod el Farag ... ..	145,900	61	.420	8	.055	13
Shubra ... ..	110,100	76	.690	19	.173	25
Sharabia ... ..	45,000	26	.578	1	.22	4
Gamalia ... ..	90,300	60	.664	13	.144	22
Bab el Shaaria ... ..	106,900	63	.589	8	.075	13
Abdine ... ..	82,700	44	.532	6	.073	14
Musky ... ..	43,900	9	.214	3	.071	33
Darb el Ahmar... ..	92,100	57	.618	7	.076	12
Khalifa ... ..	86,900	42	.473	6	.068	14
Sayeda I ... ..	77,800	105	1.349	5	.064	5
Sayeda II ... ..	73,200	104	1.421	20	.273	19
Bulaq I ... ..	52,600	34	.646	7	.133	21
Bulaq II ... ..	59,900	41	.684	5	.083	12
Bulaq III ... ..	51,300	24	.468	5	.097	21
Old Cairo ... ..	66,900	50	.598	7	.105	18
Helwan ... ..	32,100	5	.156	1	.031	20
Maadi .. ..	37,800	6	.159	2	.053	33
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>980</b>	<b>.617</b>	<b>159</b>	<b>.101</b>	<b>16</b>

TABLE NO. 153—CASES AND DEATHS OF MEASLES IN CAIRO DISTRICTS 1947

District	Population	No. of Cases	Case-Rate per 1000 of Population	No. of deaths	Death-Rate per 1000 of population	Case Mortality Rate per cent
Kubba... ..	55,900	33	.590	5	.089	15
Heliopolis ... ..	48,700	16	.328	5	.103	31
Zeitoun ... ..	49,900	86	1.723	61	1.222	71
Abbassia ... ..	101,600	52	.512	8	.079	15
Ezbekia ... ..	62,300	25	.401	12	.193	50
Rod el Farag ... ..	145,900	55	.377	19	.131	35
Shubra ... ..	110,100	30	.272	10	.091	30
Sharabia ... ..	45,000	26	.578	13	.289	50
Gamalia ... ..	90,300	35	.387	8	.089	23
Bab el Shaaria ... ..	106,900	32	.299	8	.075	25
Abdine ... ..	82,700	49	.592	35	.423	71
Musky ... ..	43,900	29	.660	11	.250	40
Darb el Ahmar ... ..	92,100	47	.509	23	.249	50
Khalifa ... ..	86,900	84	.947	53	.597	63
Sayeda I ... ..	77,800	47	.604	8	1.029	17
Sayeda II ... ..	73,200	70	.956	39	.533	56
Bulaq I ... ..	52,600	38	.722	22	.418	58
Bulaq II ... ..	59,900	32	.534	13	.217	40
Bulaq III ... ..	51,300	46	.897	32	.624	70
Old Cairo ... ..	66,900	115	1.738	80	1.195	70
Helwan ... ..	32,100	3	.093	—	—	—
Maadi ... ..	37,800	47	1.343	41	1.034	87
TOTAL ... ..	1,573,800	996	.627	506	.32	51

TABLE NO. 154—CASES AND DEATHS OF TYPHUS IN CAIRO DISTRICTS 1947

District	Population	No. of Cases	Case-Rate per 1000 of Population	No. of deaths	Death-Rate per 1000 of population	Case Mortality Rate per cent
Kubba... ..	55,900	3	.054	—	—	—
Heliopolis ... ..	48,700	1	.021	—	—	—
Zeitoun ... ..	49,900	2	.040	—	—	—
Abbassia ... ..	101,600	4	.039	2	.019	50
Ezbekia ... ..	62,300	1	.016	1	.016	100
Rod el Farag ... ..	145,900	7	.047	2	.014	28.5
Shubra ... ..	110,100	5	.045	2	.018	40
Sharabia ... ..	45,000	4	.089	—	—	—
Gamalia ... ..	90,300	1	0.aa	—	—	—
Bab el Shaaria ... ..	106,900	2	0.19	—	—	—
Abdine ... ..	82,700	4	.048	1	.012	25
Musky ... ..	43,900	2	.045	—	—	—
Darb el Ahmar ... ..	92,100	4	0.43	—	—	—
Khalifa ... ..	86,900	2	.025	—	—	—
Sayed a I ... ..	77,800	2	.025	—	—	—
Sayed a II ... ..	73,200	1	.014	1	.014	100
Bulaq I ... ..	52,600	1	0.19	1		100
Bulaq II ... ..	59,900	—	—	—	—	—
Bulaq III ... ..	51,300	—	—	—	—	—
Old Cairo ... ..	66,900	4	.059	—	—	—
Helwan ... ..	32,100	—	—	—	—	—
Maadi ... ..	37,800	1	0.26	—	—	—
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>49</b>	<b>.031</b>	<b>10</b>	<b>.006</b>	<b>20.4</b>

TABLE No. 155. — CASES AND DEATHS OF SMALL POX IN CAIRO DISTRICTS 1947

District	Population	No. of Cases	Case-Rate per 1000 of Population	No. of deaths	Death-Rate per 1000 of population	Case Mortality Rate per cent
Kubba... ..	55,900	1	.018	—	—	—
Heliopolis ... ..	48,700	4	.802	—	—	—
Zeitoun ... ..	49,900	—	—	—	—	—
Abbassia ... ..	101,600	—	—	—	—	—
Ezbekia ... ..	62,300	—	—	—	—	—
Rod el Farag ... ..	145,900	—	—	—	—	—
Shubra ... ..	110,100	—	—	—	—	—
Sharabia ... ..	45,000	—	—	—	—	—
Gamalia ... ..	90,300	—	—	—	—	—
Bab el Shaaria ... ..	106,900	—	—	—	—	—
Abdine ... ..	82,700	1	.012	—	—	—
Musky ... ..	43,900	1	.023	—	—	—
Darb el Ahmar ... ..	92,100	1	.011	—	—	—
Khalifa ... ..	86,900	—	—	—	—	—
Sayed a I ... ..	77,800	—	—	—	—	—
Sayed a II ... ..	73,200	2	.027	1	.014	50
Bulaq I ... ..	52,600	—	—	—	—	—
Bulaq II ... ..	59,900	—	—	—	—	—
Bulaq III ... ..	51,300	—	—	—	—	—
Old Cairo ... ..	66,900	—	—	—	—	—
Helwan ... ..	32,100	—	—	—	—	—
Maadi ... ..	37,800	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>10</b>	<b>.006</b>	<b>1</b>	<b>0.001</b>	<b>10</b>

TABLE No. 156.—CASES AND DEATHS OF RELAPSING FEVER IN CAIRO DISTRICTS, 1947

Districts	Population	No. of Cases	Case Rate per 1000 of population	No. of Deaths	Death Rate per 1000 of population	Case Mortality Rate Per cent
Kubba ... ..	55,900	—	—	—	—	—
Heliopolis ... ..	48,800	1	.021	—	—	—
Zeitoun ... ..	49,900	1	.020	1	.020	100
Abbassia ... ..	101,600	—	—	—	—	—
Ezbekia ... ..	62,300	—	—	—	—	—
Rod el Farag ... ..	145,900	3	.021	1	.007	33
Shubra ... ..	110,100	1	.009	1	.009	100
Sharabia ... ..	45,000	—	—	—	—	—
Gamalia ... ..	90,300	1	.011	1	.011	100
Bab el Shaaria ... ..	106,900	—	—	—	—	—
Abdine ... ..	82,700	—	—	—	—	—
Musky ... ..	43,900	—	—	—	—	—
Darb el Ahmar ... ..	92,100	—	—	—	—	—
Khalifa ... ..	86,900	—	—	—	—	—
Sayeda I ... ..	77,800	2	.026	1	.013	050
Sayeda II ... ..	73,200	—	—	—	—	—
Bulaq I ... ..	52,600	1	.019	—	—	—
Bulaq II ... ..	59,900	1	.017	—	—	—
Bulaq III ... ..	51,300	1	.019	1	.019	100
Old Cairo ... ..	66,900	—	—	—	—	—
Helwan ... ..	32,100	—	—	—	—	—
Maadi ... ..	37,800	2	.053	2	.053	100
TOTAL ... ..	1,573,800	14	.009	8	.005	57

TABLE No. 157.—CASES AND DEATHS OF C.S. FEVER IN CAIRO DISTRICTS 1947

District	Population	No. of Cases	Case Rate per 1,000 of population	No. of Deaths	Death Rate per 1,000 of population	Case Mortality Rate Per cent
Kubba ... ..	55,900	2	.037	1	.018	50
Heliopolis ... ..	48,700	3	.062	—	—	—
Zeitoun ... ..	49,900	1	.020	—	—	—
Abbassia ... ..	101,600	7	.069	6	.059	90
Ezbekia ... ..	62,300	4	.064	2	.048	75
Rod el Farag ... ..	145,900	5	.034	3	.021	60
Shubra ... ..	110,100	7	.064	1	.009	14
Sharabia ... ..	45,000	—	—	—	—	—
Gamalia ... ..	90,300	4	.044	1	.011	25
Bab el Shaaria ... ..	106,900	6	.056	3	.028	50
Abdine ... ..	82,700	1	.012	1	.012	100
Musky ... ..	43,900	3	.068	1	.023	33
Darb el Ahmar ... ..	92,100	8	.087	4	.043	50
Khalifa ... ..	86,900	2	.023	—	—	—
Sayeda I ... ..	77,800	7	.089	2	.025	29
Sayeda II ... ..	73,200	7	.090	4	.055	58
Bulaq I ... ..	52,600	1	.019	—	—	—
Bulaq II ... ..	59,900	1	.017	1	.017	100
Bulaq III ... ..	51,300	—	—	—	—	—
Old Cairo ... ..	66,900	3	.045	—	—	—
Helwan ... ..	32,100	—	—	—	—	—
Maadi ... ..	37,800	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>72</b>	<b>.045</b>	<b>31</b>	<b>.019</b>	<b>43</b>

TABLE No. 158.—CASES AND DEATHS OF SCARLET FEVER IN CAIRO DISTRICTS 1947

District	Population	No. of Cases	Case Rate per 1,000 of population	No. of Deaths	Death Rate per 1,000 of population	Case Mortality Rate Per cent
Kubba ... ..	55,900	—	—	—	—	—
Heliopolis ... ..	48,700	—	—	—	—	—
Zeitoun ... ..	49,900	—	—	—	—	—
Abbassia ... ..	101,600	1	.010	—	—	—
Ezbekia ... ..	62,300	—	—	—	—	—
Rod el Farag ... ..	145,900	—	—	—	—	—
Shubra ... ..	110,100	—	—	—	—	—
Sharabia ... ..	45,000	—	—	—	—	—
Gamalia ... ..	90,300	—	—	—	—	—
Bab el Shaaria ... ..	106,900	—	—	—	—	—
Abdine ... ..	82,700	1	.012	—	—	—
Musky ... ..	43,900	—	—	—	—	—
Darb el Ahmar ... ..	92,100	—	—	—	—	—
Khalifa ... ..	86,900	—	—	—	—	—
Sayeda I ... ..	77,800	—	—	—	—	—
Sayeda II ... ..	73,200	—	—	—	—	—
Bulaq I ... ..	52,600	—	—	—	—	—
Bulaq II ... ..	59,900	—	—	—	—	—
Bulaq III ... ..	51,300	—	—	—	—	—
Old Cairo ... ..	66,900	—	—	—	—	—
Helwan ... ..	32,100	—	—	—	—	—
Maadi ... ..	37,800	—	—	—	—	—
<b>TOTAL ... ..</b>	<b>1,573,800</b>	<b>2</b>	<b>.001</b>	<b>—</b>	<b>—</b>	<b>—</b>

TABLE No. 159.—GOVERNMENT FEVER HOSPITAL, ABBASSIA

Diseases	1946		1947											
	Cases Admitted		Cases Admitted		C. Adm. Within 3. days		C. Adm. Within 4-7. Ds.		C. Adm. After 7 days		Cases sent by H.Of.	Cases sent by Hosp	Cases sent by DRS	C. arrived on their own
	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.	Adm.	D.				
Typhus ... ..	103	30	41	8	6	4	17	3	18	1	5	10	9	17
Small-pox ...	11	1	10	1	3	—	4	1	3	1	1	3	3	3
Plague ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid ... ..	128	169	826	102	107	9	281	24	441	69	138	130	267	291
Para-Typhoid...	397	23	293	9	40	—	96	2	157	7	54	53	99	87
Diphtheria ...	388	45	226	59	140	36	64	19	22	4	26	65	80	55
Pneumonia ...	667	74	434	77	125	21	162	21	147	35	104	81	104	145
Influenza ...	3,441	—	897	—	437	—	275	—	185	—	210	247	179	261
Measles ... ..	313	20	156	10	66	2	58	3	32	5	30	29	25	72
Scarlet-Fever ...	3	1	3	—	3	—	—	—	—	—	—	—	—	1
Chicken-Pox ...	74	—	104	—	47	—	37	—	20	—	57	19	6	22
Cerebro-Spinal Fever ... ..	19	12	22	11	6	1	6	4	10	6	—	4	12	6
WhoopingCough	18	—	71	3	8	—	22	—	41	3	23	10	5	33
Tetanus ... ..	27	17	32	16	12	9	12	4	8	3	3	11	13	5
Puerperal F. ...	31	4	41	2	11	1	21	1	9	—	4	19	7	11
A : {	38	5	12	1	—	—	—	—	—	—	—	—	—	—
Dysentery ...	—	—	—	—	4	—	7	—	3	1	4	1	2	7
B : {	1	—	2	—	—	—	—	—	—	—	—	—	—	—
Relapsing F.	8,145	159	3	—	2	—	1	—	—	—	1	1	1	—
Erysipelas ...	146	6	179	4	110	2	53	—	16	2	25	88	32	34
Cholera ... ..	—	—	2,825	201	—	—	—	—	—	—	—	—	—	—
Various ... ..	4,159	318	2,331	162	—	—	—	—	—	—	—	—	—	—
<b>TOTAL ...</b>	<b>19,199</b>	<b>884</b>	<b>8,508</b>	<b>666</b>	<b>1,124</b>	<b>85</b>	<b>1,116</b>	<b>82</b>	<b>1,112</b>	<b>137</b>	<b>685</b>	<b>771</b>	<b>846</b>	<b>1,050</b>

TABLE NO. 160—AGE AND SEX DISTRIBUTION OF TYPHOID FEVER CASES AND DEATHS

Age	Male			Female			Total			No. of samp		Took 2 inj. at least one month earlier		
	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	Pos	Neg	No. of Cases	No. of Deaths	Rate %
Less than one year ... ..	3	1	33,3	6	1	17	9	2	22,2	8	1	—	—	—
1- 2 years ... ..	9	2	22,2	7	2	28,5	16	4	25	9	7	—	—	—
2- 5 „ ... ..	85	5	5,88	72	5	7	157	10	6,3	67	90	3	—	—
5-10 „ ... ..	57	8	14	40	5	12,5	97	13	13,4	30	67	7	1	14,3
10-15 „ ... ..	64	3	4,7	65	5	7	129	8	6,2	34	95	13	2	15,3
15-25 „ ... ..	153	16	10,5	76	13	17	229	29	12,6	81	148	6	1	16,6
25-35 „ ... ..	79	12	15	30	6	20	109	18	16	28	81	2	—	—
35-45 „ ... ..	38	11	29	20	4	20	58	15	26	22	36	—	—	—
45-65 „ ... ..	18	1	5,5	4	2	50	22	3	14	11	11	—	—	—
More than 65 ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	506	59	11,6	320	43	13,4	826	102	12,4	290	536	31	4	13

TABLE NO. 161.—AGE AND SEX DISTRIBUTION OF PARA TYPHOID CASES AND DEATHS

Age	Male			Female			Total			Samp		Took 3 inj before one month		
	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	Pos.	Neg.	No. of Cases	No. of Deaths	Rate %
Less than one year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years ... ..	—	—	—	1	—	—	1	—	—	—	1	—	—	—
2- 5 „ ... ..	14	—	—	10	—	—	24	—	—	1	23	2	—	—
5-10 „ ... ..	8	—	—	5	—	—	13	—	—	1	12	5	—	—
10-15 „ ... ..	39	—	—	12	—	—	51	—	—	2	49	4	—	—
15-25 „ ... ..	86	2	2,3	24	2	8,3	110	4	3,6	2	108	9	—	—
25-35 „ ... ..	35	2	6	20	1	5	55	3	,4	2	53	7	—	—
35-45 „ ... ..	16	1	6	6	—	—	22	1	4,5	1	21	3	—	—
45-65 „ ... ..	14	1	7	3	—	—	17	1	6	—	17	1	—	—
More than 65 years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	212	6	2,6	81	3	3,7	293	9	3	9	284	31	—	—

TABLE No. 162.—AGE AND SEX DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS

Age	Male			Female			Total			Samples		Took 3 inj before one month		
	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	Pos	Neg	No. of Cases	No. of Deaths	Rate %
Less than one year ... ..	18	6	33,1	1	5	555	27	11	37	22	5	1	—	—
1- 2 years ... ..	36	10	27	23	1	39,1	59	19	32	29	30	11	—	—
2- 5 „ ... ..	54	10	18,5	39	11	28	13	21	22,5	32	61	22	—	—
5-10 „ ... ..	14	4	29	15	3	20	29	7	24	14	15	6	—	—
10-15 „ ... ..	5	1	20	3	—	—	8	1	12,5	5	3	1	—	—
15- 25 „ ... ..	2	—	—	3	—	—	5	—	—	4	1	—	—	—
25-35 „ ... ..	2	—	—	3	—	—	5	—	—	3	2	1	—	—
35-45 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45-65 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
More than 65 year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	131	31	23	95	28	29,0	226	59	26	109	117	44	—	—

TABLE No. 163.—AGE AND SEX DISTRIBUTION OF PNEUMONIA CASES AND DEATHS

Age	Male			Female			Total			Lobar	Bronch
	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	Pn	Pn
Less than one year ... ..	13	4	30,7	9	3	33,3	22	7	32	4	18
1- 2 years ... ..	41	9	22	18	12	66,6	59	21	35,6	18	41
2- 5 „ ... ..	33	7	21,2	24	3	12,5	57	10	17,6	29	28
5-10 „ ... ..	12	1	8,3	7	—	—	19	1	5,3	8	11
10-15 „ ... ..	19	1	5,3	10	—	—	29	1	3,4	20	9
15-25 „ ... ..	58	1	1,7	19	2	10,5	77	3	4	54	23
25-35 „ ... ..	65	9	14	9	3	33,3	74	12	16	56	18
35-45 „ ... ..	40	10	25	5	—	—	45	10	22,	29	16
45-65 „ ... ..	39	8	20,5	12	3	25	51	11	21,5	32	19
More than 65 year ... ..	1	1	100	—	—	—	1	1	100	—	1
TOTAL ... ..	321	51	15,9	113	26	22	434	77	17,7	250	184

TABLE NO. 164.—AGE AND SEX DISTRIBUTION OF TYPHUS CASES AND DEATHS

Age	Male			Female			Total			Samples		Took 3 inj. before one month		
	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	Pos.	Neg.	No. of Cases	No. of Deaths	Rate %
Less than one year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1- 2 years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2- 5 „ ... ..	—	—	—	1	—	—	1	—	—	1	—	—	—	—
5-10 „ ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10-15 „ ... ..	—	—	—	2	—	—	2	—	—	—	2	—	—	—
15-25 „ ... ..	7	3	43	5	1	20	12	4	33,3	3	9	—	—	—
25-35 „ ... ..	13	2	15,4	4	—	—	17	2	11,7	3	14	—	—	—
35-45 „ ... ..	5	2	406	3	—	—	8	2	25	3	5	—	—	—
45-65 „ ... ..	1	—	—	—	—	—	1	—	—	—	1	—	—	—
More than 65 years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ... ..	26	7	27	15	1	6,6	41	8	19,5	10	31	—	—	—

TABLE No. 165.—AGE AND SEX DISTRIBUTION OF SMALL POX CASES AND DEATHS

Age		Male			Female			Total			Not vaccinated in Infancy			Vaccinated one year ago			Vaccinated 1-3 years ago		
		No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%	No. of Cases	No. of Deaths	%
Less than one year	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1-2 years	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2-5 "	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5-10 "	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10-15 "	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15-25 "	... ..	3	—	—	—	—	—	3	—	—	—	3	—	—	—	—	—	—	—
25-35 "	... ..	1	—	—	—	4	—	5	—	—	5	—	—	—	—	—	—	—	—
35-45 "	... ..	1	—	—	1	1	100	2	1	50	2	—	1 5,900	—	—	—	—	—	—
45-65 "	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
More than 65 years...	... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	... ..	5	—	—	5	1	26	10	1	10	10	1	10,900	—	—	—	—	—	—

TABLE No. 166.—AGE AND SEX DISTRIBUTION OF ERYSIPELAS CASES AND DEATHS

Age	Male			Female			Total			Treatment with serum and Sulphanilamide Comp			Treatment with Sulphanilamide, alone		
	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %
Less than one year	8	—	—	6	1	16,6	14	1	7,1	14	1	7,1	—	—	—
1—2 years	1	—	—	4	—	—	5	—	—	5	—	—	—	—	—
2—5 "	2	—	—	5	—	—	7	—	—	7	—	—	—	—	—
5—10 "	1	—	—	5	—	—	6	—	—	6	—	—	—	—	—
10—15 "	2	—	—	4	—	—	6	—	—	6	—	—	—	—	—
15—25 "	25	—	—	18	1	5,5	43	1	2,3	43	1	2,3	—	—	—
25—35 "	17	—	—	12	—	—	29	—	—	28	—	—	1	—	—
35—45 "	14	—	—	28	1	3,6	42	1	2,4	40	1	2,5	2	—	—
45—65 "	18	1	5,5	7	—	—	25	1	4	23	—	—	2	1	50
More than 65 years	2	—	—	—	—	0	2	—	—	2	—	—	—	—	—
TOTAL	90	1	1,1	89	3	33,7	179	4	2,2	174	2	1,15	5	1	20

TABLE No. 167.—AGE AND SEX DISTRIBUTION OF CEREBRO SPINAL FEVER CASES AND DEATHS.

Age	Male			Female			Total			Samples of C.S.F.		Swabs from Throat	
	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	No. of Cases	No. of Deaths	Rate %	Pos.	Neg.	Pos.	Neg.
Less than one year ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
1— 2 Years ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
2— 5 „ ... ..	1	—	—	1	—	—	2	—	—	1	1	—	—
5—10 „ ... ..	2	1	50	1	—	—	3	1	33,3	1	2	—	—
10—15 „ ... ..	2	—	—	1	1	100	3	1	33,3	2	1	—	—
15—25 „ ... ..	3	2	66,6	—	—	—	3	2	66,6	1	2	—	—
25—35 „ ... ..	2	1	50	—	—	—	2	1	50	1	1	—	—
35—45 „ ... ..	3	2	66,6	1	1	100	4	3	75	—	4	—	—
45—65 „ ... ..	2	2	100	1	—	—	3	2	66,6	2	1	—	—
More than 65 Years ... ..	1	1	100	1	—	—	2	1	50	2	—	—	—
<b>TOTAL ... ..</b>	<b>11</b>	<b>9</b>	<b>56,3</b>	<b>6</b>	<b>2</b>	<b>33,3</b>	<b>22</b>	<b>11</b>	<b>50</b>	<b>10</b>	<b>12</b>	<b>—</b>	<b>—</b>

### PASSENGER CONTROL

#### *Passengers :*

During 1947, 30,104 passengers arrived from infected countries ; as compared with 27,562 in 1946. Of this number, 8,016 passengers arrived by air, 2,103 arrived by car via Ismailia, 1,155 arrived via Suez and 4,446 via Kantara. Passengers arriving by sea were 3,179 via Alexandria and 310 via Port-Said. Moreover 859 passengers arrived from the Sudan through Shellal and were observed for small-pox, meningitis and yellow fever.

All these passengers numbering 30,104 with the exception of 132 who could not be traced, were observed during the regulation period giving a percentage of 99·56.

#### *Pilgrims :*

The number of Egyptian pilgrims returning from the Hedjaz during the year was 2,079 as compared with 6,221 in the previous year. All the returning pilgrims underwent the regulation period of observation and were found in good health.

#### *Deaths :*

3 pilgrims died in the Hedjaz. In addition, 37 pilgrims from other than Cairo districts were observed and found in good health.

Officials and employees of Tor Mission numbering 47 were observed and found in good health.

### SANITARY CONTROL OF PUBLIC WOMEN

The total number of registered prostitutes for the year 1947 was 463 as compared with 509 in 1946. 39 were struck off the register during the year.

The total number of examinations held was 20,717. 156 Prostitutes were found suffering from venereal diseases, distributed as follows :

Acute Gonorrhoea	...	...	...	...	...	...	...	...	...	2
Chronic Gonorrhoea	...	...	...	...	...	...	...	...	...	90
Bartolinitis	...	...	...	...	...	...	...	...	...	1
Primary Syphilis	...	...	...	...	...	...	...	...	...	5
Secondary Syphilis	...	...	...	...	...	...	...	...	...	53
Soft Sore	...	...	...	...	...	...	...	...	...	5
TOTAL										156

The number of arrested women was 125 as compared with 271 in 1946. The incidence of disease amongst them was as follows :

Chronic Gonorrhoea	...	...	...	...	...	...	...	...	...	26
Secondary Syphilis	...	...	...	...	...	...	...	...	...	39
Scabies	...	...	...	...	...	...	...	...	...	2
TOTAL										67

WASSERMANN EXAMINATION OF BLOOD :

*Prostitutes.*—51 were found positive out of 428.

*Arrested Women.*—39 were found positive out of 125.

*Complaints against Prostitutes :*

18 complaints were received. All proved to be false.

TABLE No. 168 -- SHOWING VENEREAL DISEASES  
DISCOVERED AMONGST REGISTERED PROSTITUTES

	1946	1947
Primary Syphilis	3	5
Secondary Syphilis	48	53
TOTAL	51	58
Acute Gonorrhoea	—	2
Chronic Gonorrhoea	76	90
Bartolinitis	—	1
TOTAL	76	93
Soft Sore	8	5
Scabies	5	—
TOTAL	140	156

# POLICE HEALTH OFFICE

The strength of Cairo City Police was 12,297 men in 1947. The following is a brief statement on the work carried out by this office during the year.

## *Medical Work :*

Policemen examined for sick-leaves	... ..	11,094
Other personnel examined for sick-leaves	... ..	1,535
Medico-Legal reports	... ..	35,857
Motor car and cab drivers examined for practising professions	... ..	7,595
Candidates examined for service in police force	... ..	345

## *Sanitary Work :*

Inspection of Police units	... ..	142
Number vaccinated against Cholera	... ..	1,021
„ „ „ Small Pox	... ..	11,317
„ „ „ Typhoid (two injections)	... ..	6,209
„ stung by scorpion and rendered 1st aid by injections		1,004

The more common diseases among non-commissioned officers and policemen were : wounds, operations, bronchitis, and rheumatism. The number of cases of these diseases were 1,056, 1026, 968, and 895 respectively.

The more common diseases among officers and civilians were : bronchitis, rheumatism nephritic colic, and Gastric colic. The number of cases of these diseases were : 253, 224, 197 and 193 respectively.

16 police N.C.O's and men were sent to the fever hospital suffering from typhoid and paratyphoid. 1,036 persons were put under observation for infectious diseases during the year.

## UNHEALTHY, INCONVENIENT AND DANGEROUS ESTABLISHMENTS

Under Law No. 13 of August 28, 1904 and Arrêté of the Ministry of Interior of August 29 of the same year, the following establishments were licensed during the year 1947 .

1st Class			2nd Class			3rd Class			GRAND TOTAL
Saha	Zabt	Total	Saha	Zabt	Total	Saha	Zabt	Total	
264	208	472	923	389	1,312	555	118	673	2,457

A total of 20,524 unhealthy, inconvenient and dangerous establishments were inspected during 1947. Of these 16,808 were found satisfactory and 3,716 unsatisfactory.

3,007 Procès-verbaux of contravention were drawn up against establishments exploited without licences and 2,381 contraventions were drawn up for lacking sanitary conditions in licensed establishments making a total of 5,388 contraventions.

Under Law No. 1 of 1904 substituted by Law No. 38 of 1941, 95 cinemas, theatres and other public establishments were inspected during the year.

### General Sanitation :

The activities of the Sanitation Section during the year 1947 can be summarised as follows :

(1) Samples of water were regularly taken from the different main water supplies of the City, Gîza, Helwan and Zeitoun in order to ensure the good quality of the water. Also samples of water were taken from taps in different parts of the City and from swimming pools.

(2) Five free water taps were erected during October 1947 in different parts of the City.

(3) 17 water taps provided by Cairo Water Company were operated by the Section in different parts of the City during October 1947.

(4) During November 1947, five free water taps were erected in different parts of the City against Cholera Credits.

(5) Three water basins for washing vegetables intended for sale have been constructed at Shoubra.

(6) Law No. 151 of 1947 substituting Arrêté of Ministry of Interior dated June 15, 1893 governing fencing and cleaning waste lands has been enacted.

(7) 5,153 permits were issued for evacuation of private cisterns.

(8) Some 6,400 complaints were received and dealt with in respect of throwing waste water in the streets, overflowing cisterns or filthy dwellings, etc.

(9) Co-operation with the Scavenging Section for the cleanliness of public roads and lanes.

NUMBER OF MILK SAMPLES TAKEN DURING 1947 AND THE RATE OF ADULTERATION THEREIN

Number of Samples	Adulterated Samples						Total number of adult. samples	Number of genuine samples	Percentage of adulteration
	Skimmed Samples		Samples to which water was added		Samples skimmed and to which water was added				
7118	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.			
	949	13.3%	143	2%	162	2.3%	1,254	5,864	17.6%

## LIST OF CONTRAVENTIONS MADE DURING THE YEAR 1947

IN APPLICATION OF THE FOLLOWING ACTS :

1,633	No. of procès-verbaux drawn up under law No. 48 of 1941
4,603	No. of procès-verbaux drawn up under Law No. 73 of 1943 re Itinerant vendors
1	No. of procès verbaux drawn up against milk vendors under Arrêté of Ministry of Interior dated 18, 5, 1925
169	No. of procès verbaux drawn up under Arrêté of Cairo Governorate dated 27. 3. 911 re Markets
1	No. of 'procès verbaux drawn up under Arrêté 275 dated 6, 10, 1945 re Alcoholic liquors
50	Procès verbaux drawn up under Law No. 108 of 1945 re Refuse
35	Procès-verbaux drawn up under Law 108 of 1945 re ice cream manufacture
6	Procès verbaux drawn up under slaughter houses Regulations
1	Procès verbaux drawn up under Law No. 5 of 941 re practising pharmacy without licence

Number of milk vendors licensed	...	...	...	...	...	...	...	942
" Itinerant vendors licensed	...	...	...	...	...	...	...	453
" cases of food poisoning	...	...	...	...	...	...	...	341
" complaints received and dealt with	...	...	...	...	...	...	...	711







## PUBLIC BATHHOUSES AND LAUNDRIES

26 public bathhouses had been hired by the Ministry during 1947 for the free use of the poorer classes as a contribution towards their cleanliness. Until June of this year, the Ministry had completed the construction of ten public bathhouses and laundries and had, consequently, dispensed with 15 of the hired number. The remaining eleven bathhouses had to be dispensed with following the cholera outbreak in order to eliminate any danger arising from use of rubbish for fuel.

Some 2,514,418 persons made use of these bathhouses and 1,372,363 persons were deloused making a total of 3,886,681. 70 tons of soap and thousands of cubic metres of hot water were used for the purpose.

## PERMITS OFFICE OF THE MINISTRY OF INTERIOR

A total of 37,478 persons applying for permits to pursue various public occupations were immunized against typhoid, typhus and small pox by staff of this Ministry.

## ANTE-MATRIMONY EXAMINATION OFFICE

During the year, a total of 53 persons (51 males and 2 females) presented themselves for examination. Of 38 persons found fit, 14 received the necessary certificates. The remaining 24 failed to turn up for the certificates. Five absented themselves before completion of examination and ten were found unfit — five suffered from gonorrhoea and five from syphilis.

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*Director.*

HASSAN ALI KLEWA.